

CHAPTER 4

POINT AND NONPOINT SOURCE CHARACTERIZATION OF THE LITTLE HATCHIE RIVER WATERSHED

4.1 Background.

4.2. Characterization of HUC-10 Subwatersheds

4.2.A. 0801020702 (Tuscumbia River)

4.2.B. 0801020704 (Hatchie River)

4.2.C. 0801020705 (Muddy Creek)

4.2.D. 0801020706 (Cypress Creek)

4.2.E. 0801020707 (Little Hatchie Creek)

4.1. BACKGROUND. This chapter is organized by HUC-12 subwatershed, and the description of each subwatershed is divided into four parts:

- i. General description of the subwatershed
- ii. Description of point source contributions
 - ii.a. Description of facilities discharging to water bodies listed on the 2004 303(d) list
- iii. Description of nonpoint source contributions

The Tennessee portion of the Little Hatchie River Watershed (HUC 08010207) has been delineated into five HUC 10 (10-digit) subwatersheds, each of which is composed of one or more HUC-12 subwatersheds.

Information for this chapter was obtained from databases maintained by the Division of Water Pollution Control or provided in the WCS (Watershed Characterization System) data set. The WCS used was version 2.0 (developed by Tetra Tech, Inc for EPA Region 4) released in 2003.

WCS integrates with ArcView® v3.x and Spatial Analyst® v1.1 to analyze user-delineated (sub)watersheds based on hydrologically connected water bodies. Reports are generated by integrating WCS with Microsoft® Word. Land Use/Land Cover information from 1992 MRLC (Multi-Resolution Land Cover) data are calculated based on the proportion of county-based land use/land cover in user-delineated (sub)watersheds. Nonpoint source data in WCS are based on agricultural census data collected 1992–1998; nonpoint source data were reviewed by Tennessee NRCS staff.

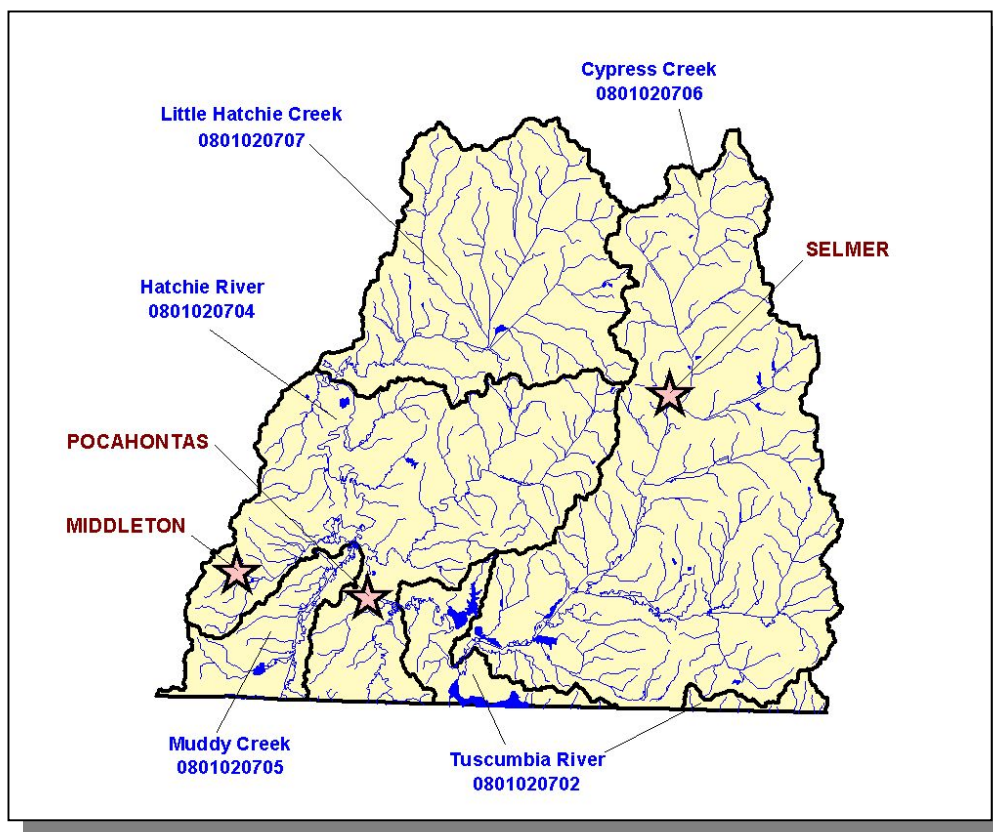


Figure 4-1. The Tennessee Portion of the Little Hatchie River Watershed is Composed of Five USGS-Delineated Subwatersheds (10-Digit Subwatersheds). Locations of Middleton, Pocahontas, and Selmer are shown for reference.

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4.2. CHARACTERIZATION OF HUC-10 SUBWATERSHEDS. The Watershed Characterization System (WCS) software and data sets provided by EPA Region IV were used to characterize each subwatershed in the Tennessee portion of the Little Hatchie River Watershed.

HUC-10	HUC-12
0801020702	080102070202 (Bridge Creek)
	080102070203 (Cain Creek)
	080102070208 (Tuscumbia Creek)
0801020704	080102070401 (Hatchie River)
	080102070408 Hatchie River)
	080102070409 (Mosses Creek)
0801020705	080102070501 (Muddy Creek)
0801020706	080102070601 (Upper Cypress Creek)
	080102070602 (Muddy Creek)
	080102070603 (Lower Cypress Creek)
0801020707	080102070701 (Upper Little Hatchie Creek)
	080102070702 (Lower Little Hatchie Creek)

Table 4-1. HUC-12 Drainage Areas are Nested Within HUC-10 Drainages. NRCS worked with USGS to delineate the HUC-10 and HUC-12 drainage boundaries.

4.2.A. 0801020702.

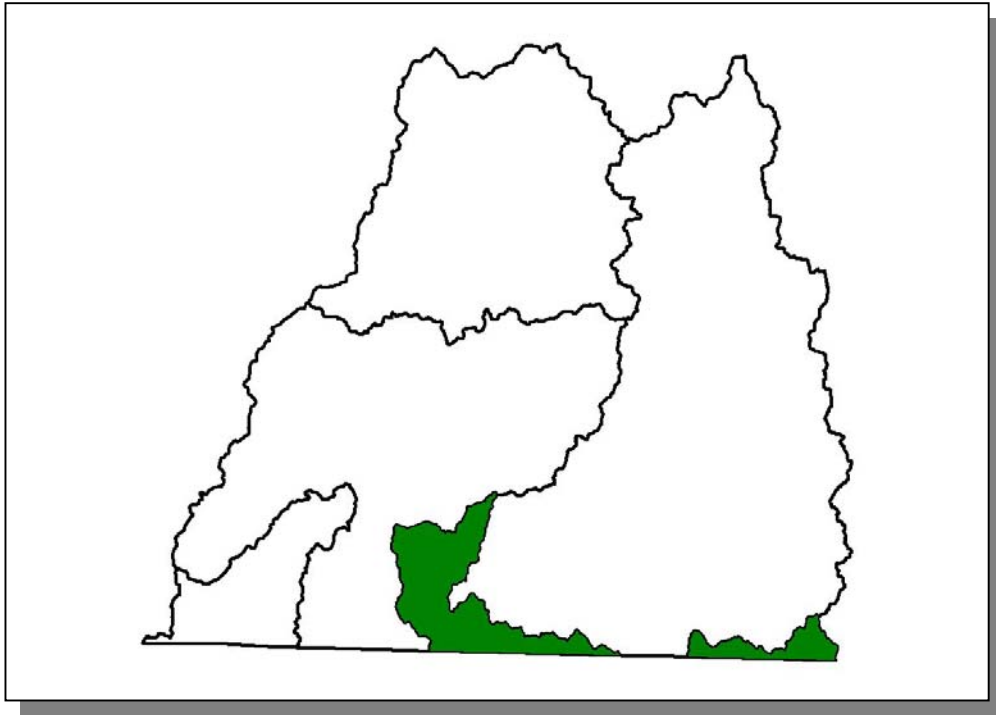


Figure 4-2. Location of Subwatershed 0801020702. All Little Hatchie River HUC-10 subwatershed boundaries in Tennessee are shown for reference.

4.2.A.i. 080102070202 (Bridge Creek).

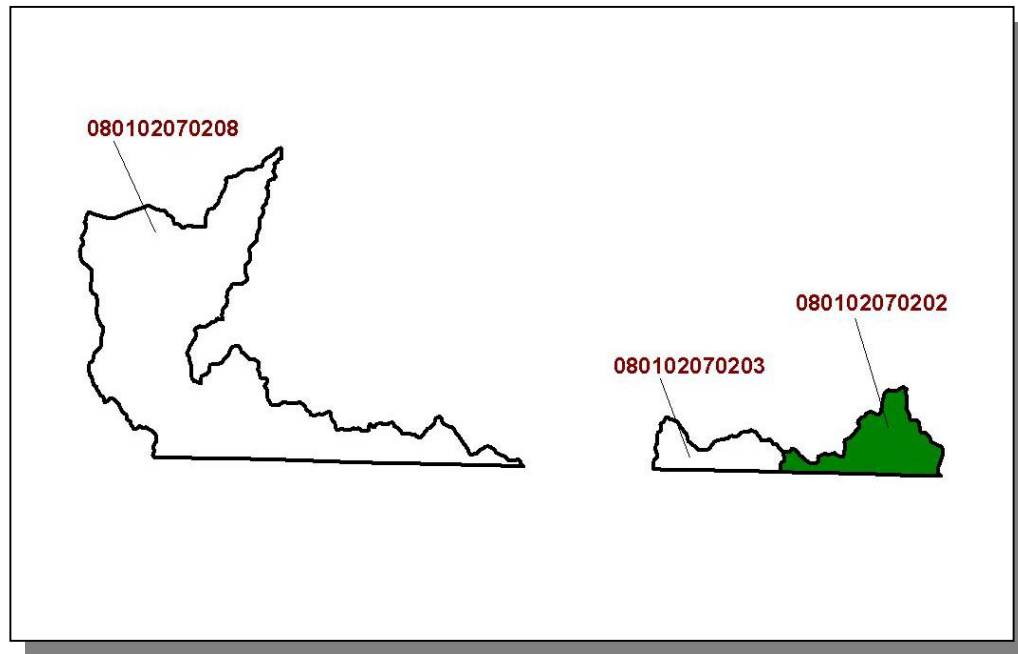


Figure 4-3. Location of Subwatershed 080102070202. All HUC-12 subwatershed boundaries are shown for reference.

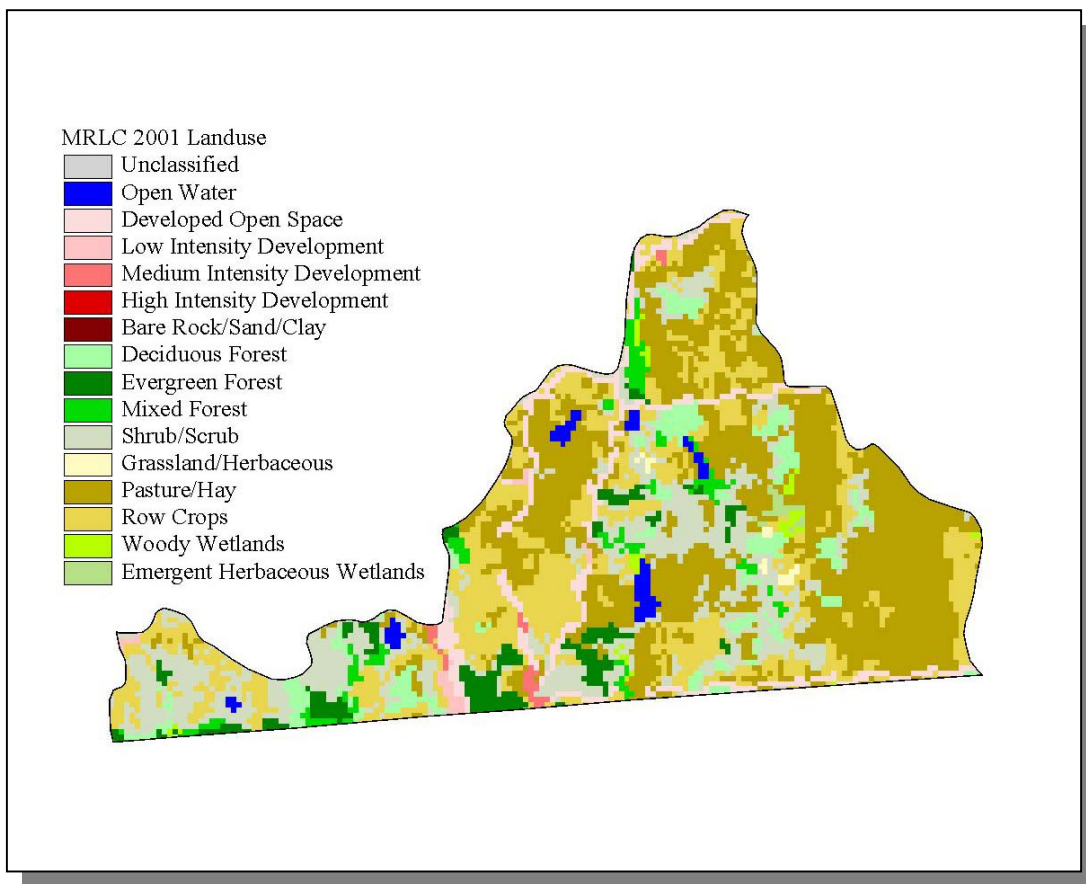


Figure 4-4. Illustration of Land Use Distribution in Subwatershed 080102070202.

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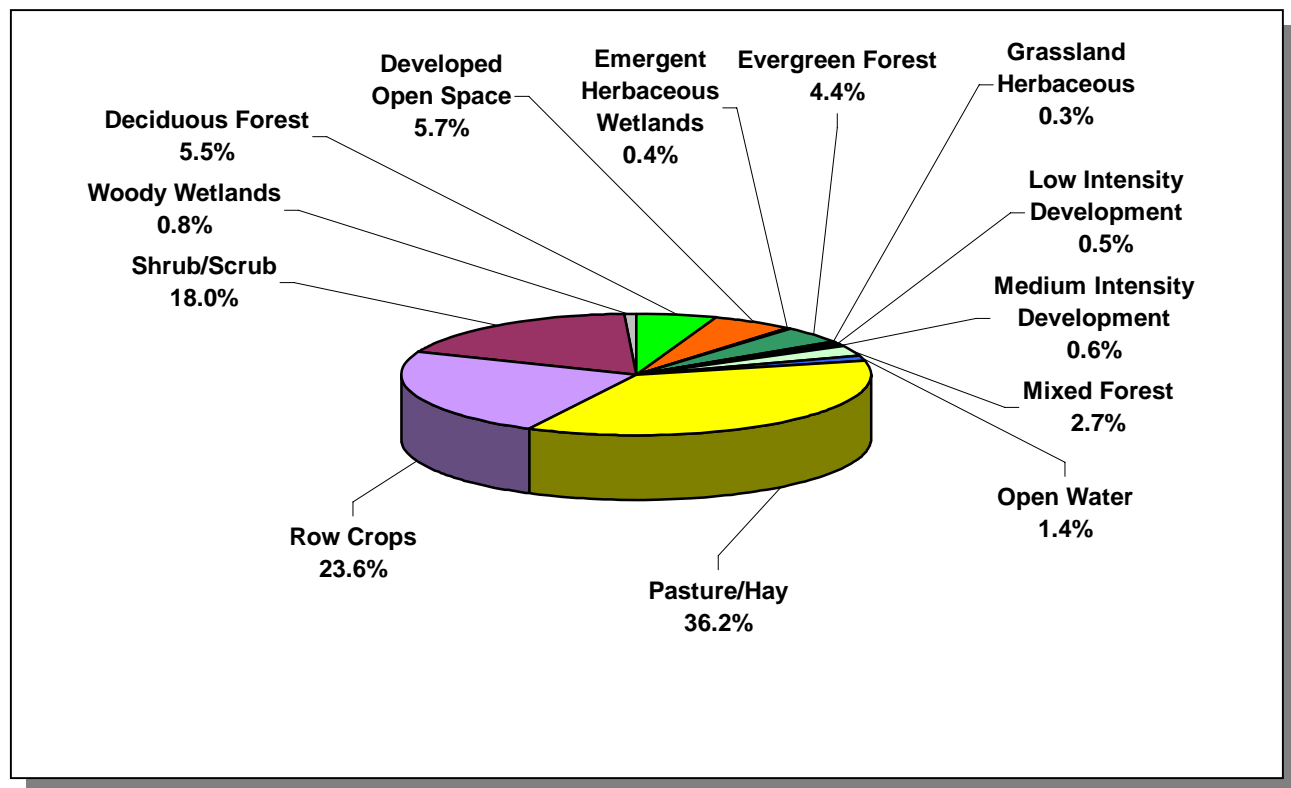


Figure 4-5. Land Use Distribution in Subwatershed 080102070202. More information is provided in Appendix IV.

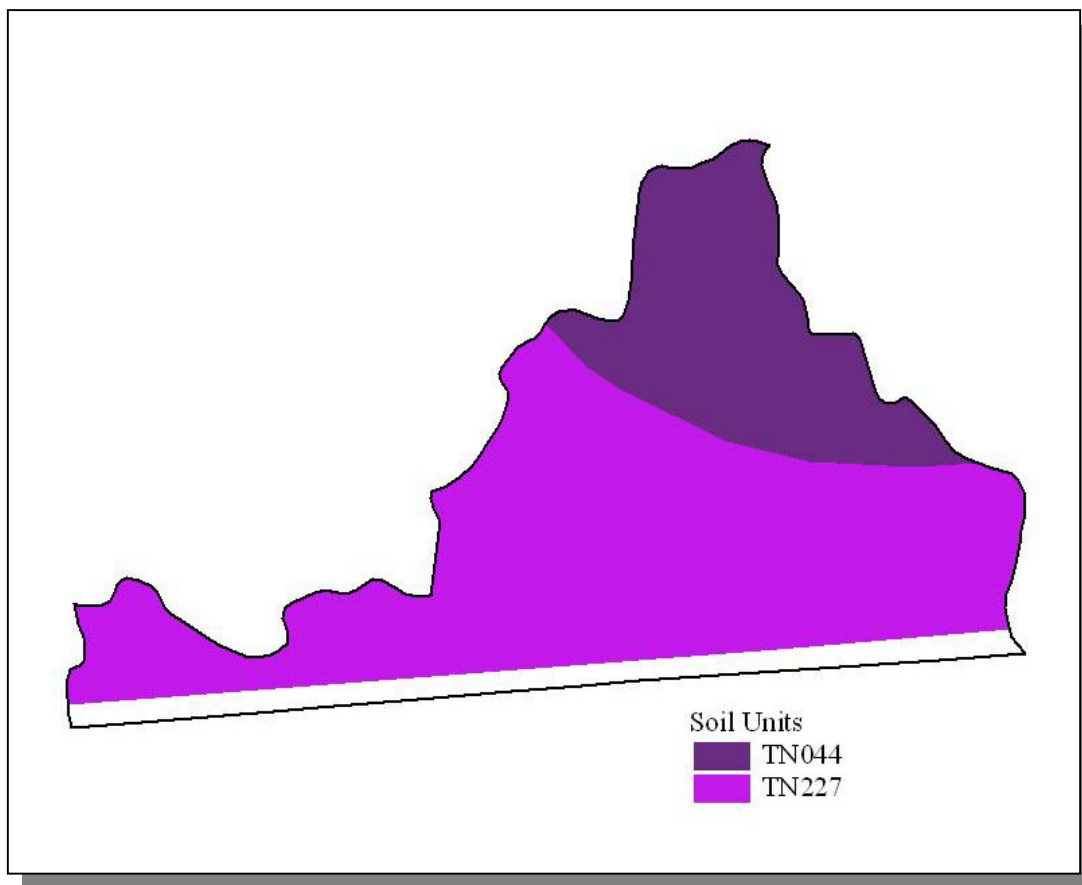


Figure 4-6. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102070202.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN044	0.00	C	1.48	5.32	Silty Loam	0.42
TN227	0.00	C	2.41	5.03	Silty Loam	0.38

Table 4-2. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102070202. The definition of "Hydrologic Group" is provided in Appendix IV.

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County	COUNTY POPULATION			Portion of Watershed (%)	ESTIMATED POPULATION IN WATERSHED			% Change (1990-2000)
	1990	1997	2000		1990	1997	2000	
McNairy	22,422	23,678	24,653	0.16	37	39	41	10.8

Table 4-3. Population Estimates in Subwatershed 080102070202.

			NUMBER OF HOUSING UNITS			
Populated Place	County	Population	Total	Public Sewer	Septic Tank	Other
Guys	McNairy	492	194	4	182	8

Table 4-4. Housing and Sewage Disposal Practices of Select Communities in Subwatershed 080102070202.

4.2.A.i.a. Point Source Contributions.

There are no point source contributions in this subwatershed.

4.2.A.i.b. Nonpoint Source Contributions.

LIVESTOCK COUNTS			
Beef Cow	Cattle	Hogs	Sheep
70	136	77	<5

Table 4-5. Summary of Livestock Count Estimates in Subwatershed 080102070202. According to the 1997 Census of Agriculture (<http://www.nass.usda.gov/census/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

LIVESTOCK COUNTS						
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
McNairy	5,659	10,365	7	491	11,346	98

Table 4-6. Summary of Livestock Count Estimates in Knox County. According to the 1997 Census of Agriculture (<http://www.nass.usda.gov/census/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

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	INVENTORY		REMOVAL RATE	
County	Forest Land (thousand acres)	Timber Land (thousand acres)	Growing Stock (million cubic feet)	Sawtimber (million board feet)
McNairy				

Table 4-7. Forest Acreage and Annual Removal Rates (1987-1994) in McNairy County.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	0.61
Grass (Hayland)	0.88
Legumes, Grass (Hayland)	0.07
Legumes (Hayland)	0.12
Grass, Forbs, Legumes (Mixed Pasture)	0.87
Corn (Row Crops)	8.76
Cotton (Row Crops)	11.84
Sorghum (Row Crops)	3.62
Soybeans (Row Crops)	8.00
Wheat (Close-Grown Cropland)	1.92
Other Cropland not Planted	1.98
Conservation Reserve Program Lands	0.23
Farmsteads and Ranch Headquarters	0.09

Table 4-8. Annual Estimated Total Soil Loss in Subwatershed 080102070202.

4.2.A.ii. 080102070203 (Cain Creek).

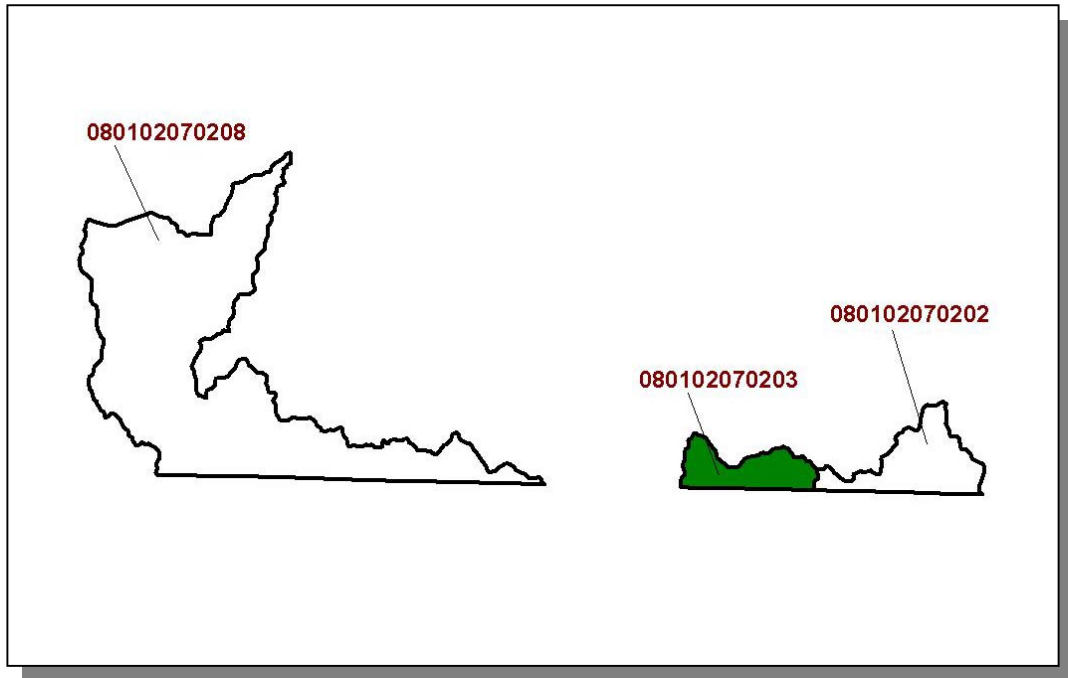


Figure 4-7. Location of Subwatershed 080102070203. All HUC-12 subwatershed boundaries are shown for reference.

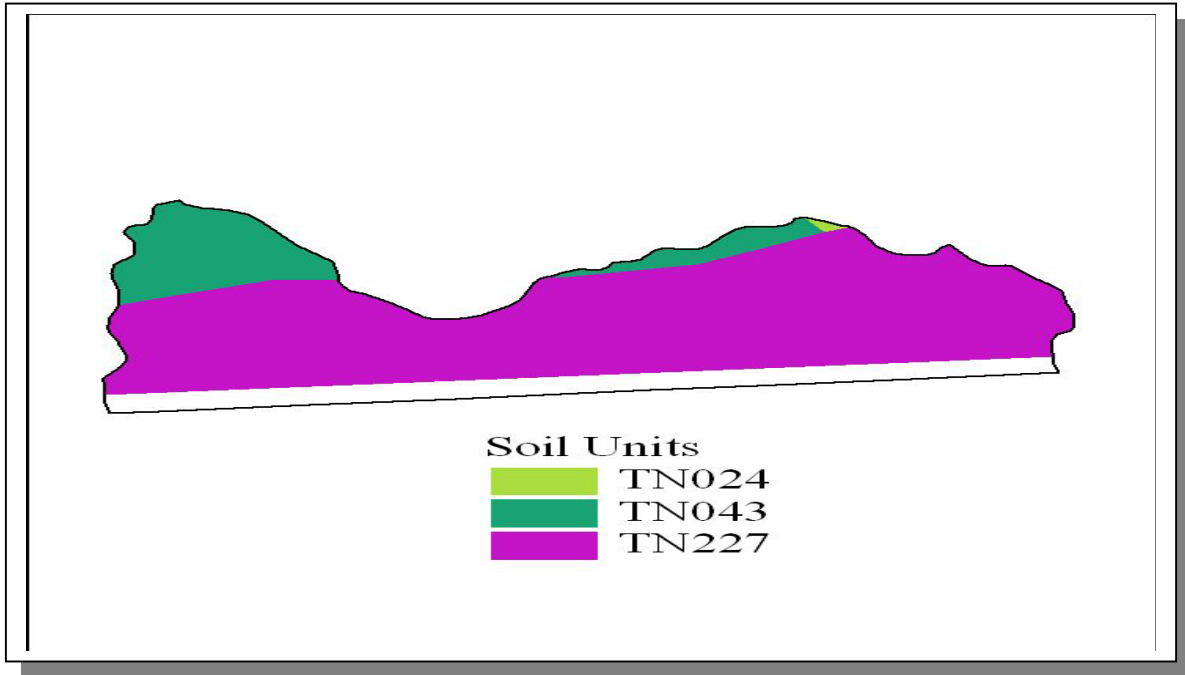


Figure 4-8. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102070203.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN024	61.00	D	2.18	5.35	Loam	0.29
TN043	0.00	C	2.70	5.02	Loam	0.30
TN227	0.00	C	2.41	5.03	Silty Loam	0.38

Table 4-9. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102070203. The definition of "Hydrologic Group" is provided in Appendix IV.

County	COUNTY POPULATION			Portion of Watershed (%)	ESTIMATED POPULATION IN WATERSHED			% Change (1990-2000)
	1990	1997	2000		1990	1997	2000	
McNairy	22,422	23,678	24,653	0.04	10	10	11	10.0

Table 4-10. Population Estimates in Subwatershed 080102070203.

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			NUMBER OF HOUSING UNITS			
Populated Place	County	Population	Total	Public Sewer	Septic Tank	Other
Guys	McNairy	492	194	4	182	8

Table 4-11. Housing and Sewage Disposal Practices of Select Communities in Subwatershed 080102070203.

4.2.A.ii.a. Point Source Contributions.

There are no point source contributions in this subwatershed.

4.2.A.ii.b. Nonpoint Source Contributions.

LIVESTOCK COUNTS		
Beef Cow	Cattle	Hogs
12	23	6

Table 4-12. Summary of Livestock Count Estimates in Subwatershed 080101070203. According to the 1997 Census of Agriculture (<http://www.nass.usda.gov/census/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

LIVESTOCK COUNTS						
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
McNairy	5,659	10,365	7	491	11,346	98

Table 4-13. Summary of Livestock Count Estimates in McNairy County. According to the 1997 Census of Agriculture (<http://www.nass.usda.gov/census/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

INVENTORY			REMOVAL RATE	
County	Forest Land (thousand acres)	Timber Land (thousand acres)	Growing Stock (million cubic feet)	Sawtimber (million board feet)
McNairy				

Table 4-14. Forest Acreage and Annual Removal Rates (1987-1994) in McNairy County.

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CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	0.63
Grass (Hayland)	1.17
Legumes, Grass (Hayland)	0.07
Legumes (Hayland)	0.12
Grass, Forbs, Legumes (Mixed Pasture)	0.97
Corn (Row Crops)	7.94
Cotton (Row Crops)	14.17
Sorghum (Row Crops)	3.61
Soybeans (Row Crops)	7.36
Wheat (Close-Grown Cropland)	1.92
Other Cropland not Planted	1.87
Conservation Reserve Program Lands	0.21
Farmsteads and Ranch Headquarters	0.08

Table 4-15. Annual Estimated Total Soil Loss in Subwatershed 080102070203.

4.2.A.iii. 080102070208 (Tuscumbia Creek).

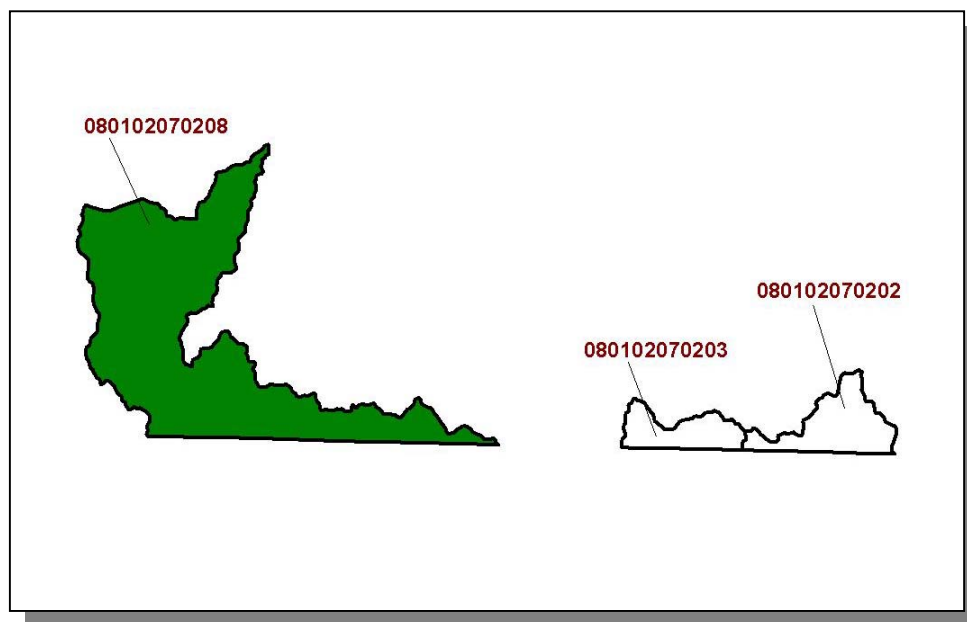


Figure 4-9. Location of Subwatershed 080102070208. All HUC-12 subwatershed boundaries are shown for reference.

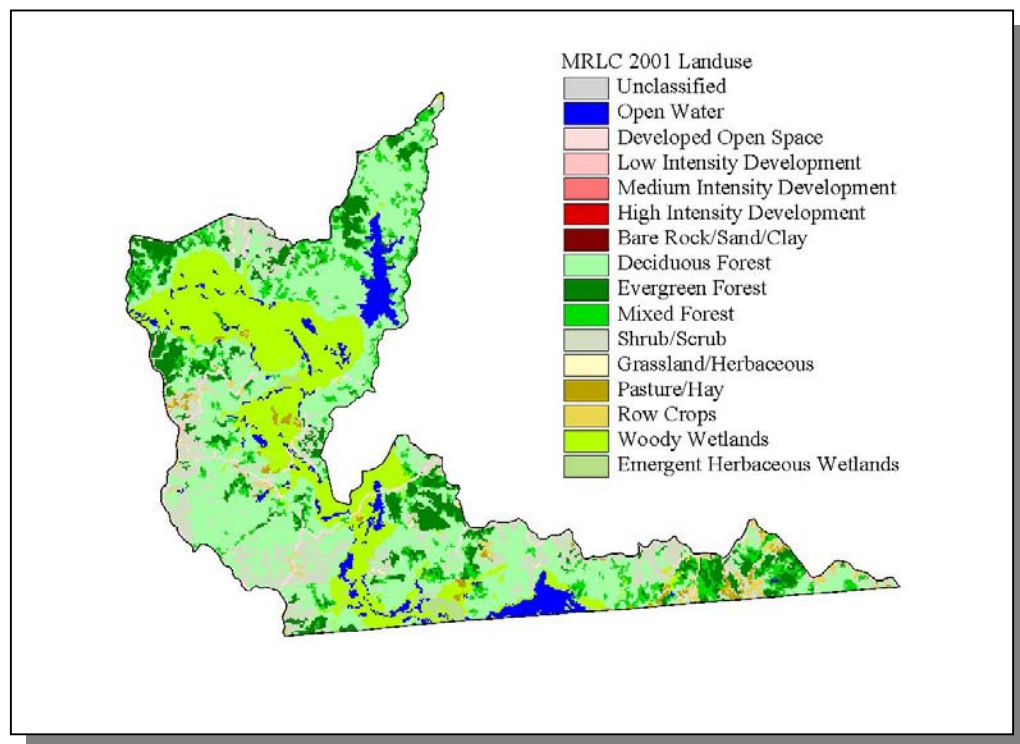


Figure 4-10. Illustration of Land Use Distribution in Subwatershed 080102070208.

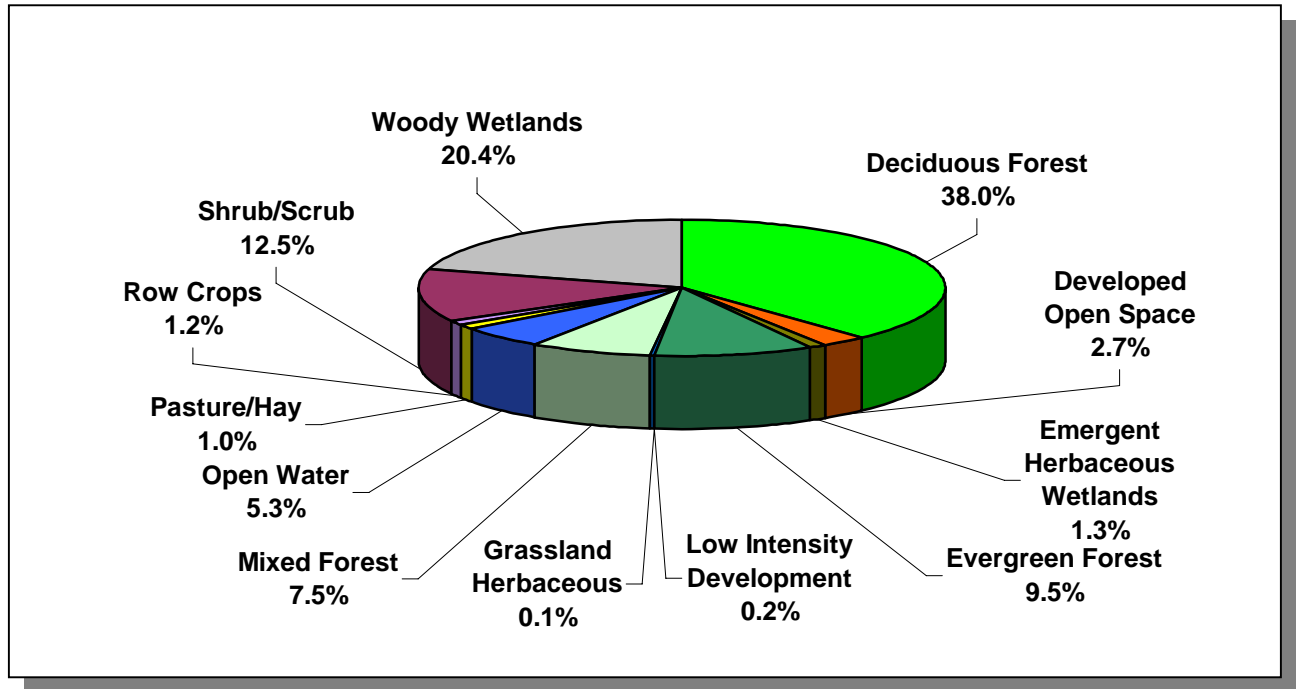


Figure 4-11. Land Use Distribution in Subwatershed 080102070208. More information is provided in Appendix IV.

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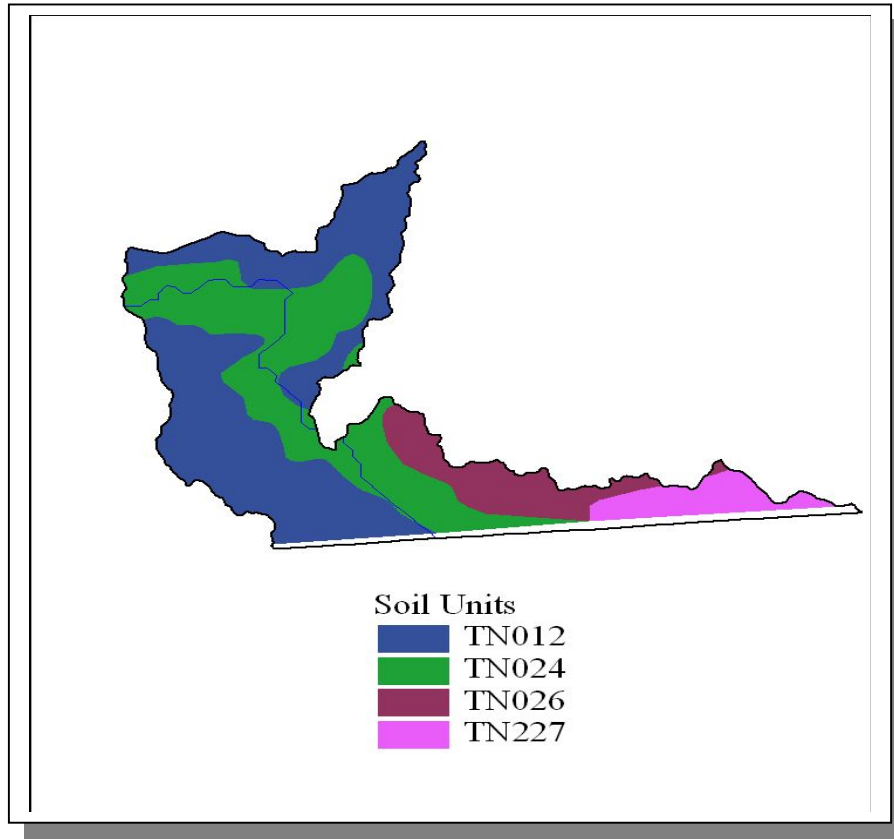


Figure 4-12. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102070208.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN012	1.00	C	2.52	5.13	Silty Loam	0.39
TN024	61.00	D	2.18	5.35	Loam	0.29
TN026	0.00	B	1.52	5.13	Silty Loam	0.40
TN227	0.00	C	2.41	5.03	Silty Loam	0.38

Table 4-16. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102070208. The definition of "Hydrologic Group" is provided in Appendix IV.

County	COUNTY POPULATION			Portion of Watershed (%)	ESTIMATED POPULATION IN WATERSHED			% Change (1990-2000)
	1990	1997	2000		1990	1997	2000	
McNairy	22,422	23,678	24,653	2.32	520	549	572	10.0

Table 4-17. Population Estimates in Subwatershed 080102070208.

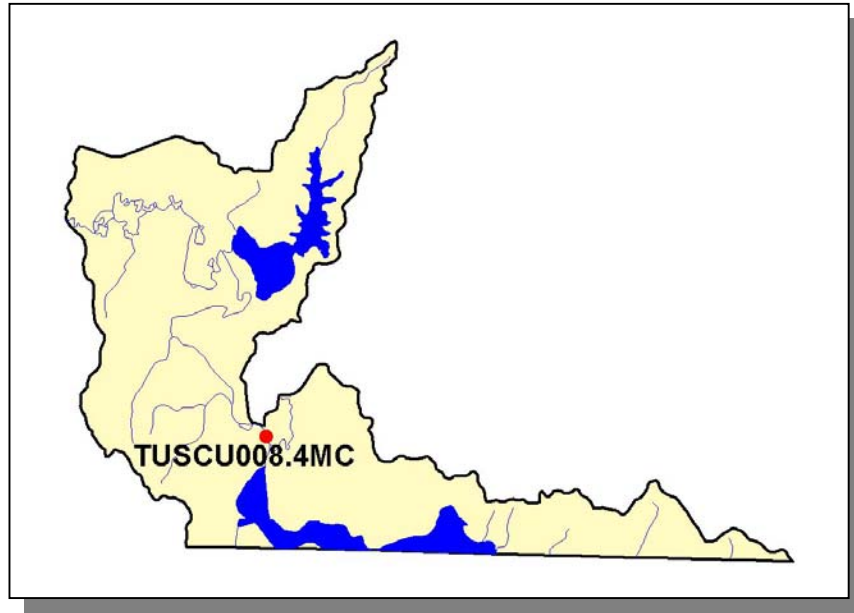


Figure 4-13. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 080102070208. More information, including site names and locations, is provided in Appendix IV.

4.2.A.iii.a. Point Source Contributions.

There are no point source contributions in this subwatershed.

4.2.A.iii.b. Nonpoint Source Contributions.

LIVESTOCK COUNTS		
Beef Cow	Cattle	Hogs
25	49	22

Table 4-18. Summary of Livestock Count Estimates in Subwatershed 080102070208. According to the 1997 Census of Agriculture (<http://www.nass.usda.gov/census/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves.

LIVESTOCK COUNTS						
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
McNairy	5,659	10,365	7	491	11,346	98

Table 4-19. Summary of Livestock Count Estimates in McNairy County. According to the 1997 Census of Agriculture (<http://www.nass.usda.gov/census/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

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County	INVENTORY		REMOVAL RATE	
	Forest Land (thousand acres)	Timber Land (thousand acres)	Growing Stock (million cubic feet)	Sawtimber (million board feet)
McNairy				

Table 4-20. Forest Acreage and Annual Removal Rates (1987-1994) in McNairy County.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	0.57
Grass (Hayland)	0.35
Legumes, Grass (Hayland)	0.07
Legumes (Hayland)	0.12
Grass, Forbs, Legumes (Mixed Pasture)	0.69
Corn (Row Crops)	10.22
Cotton (Row Crops)	7.72
Sorghum (Row Crops)	3.61
Soybeans (Row Crops)	9.14
Wheat (Close-Grown Cropland)	1.92
Other Cropland not Planted	2.17
Conservation Reserve Program Lands	0.26
Farmsteads and Ranch Headquarters	0.10

Table 4-21. Annual Estimated Total Soil Loss in Subwatershed 080102070208.

4.2.B. 0801020704.

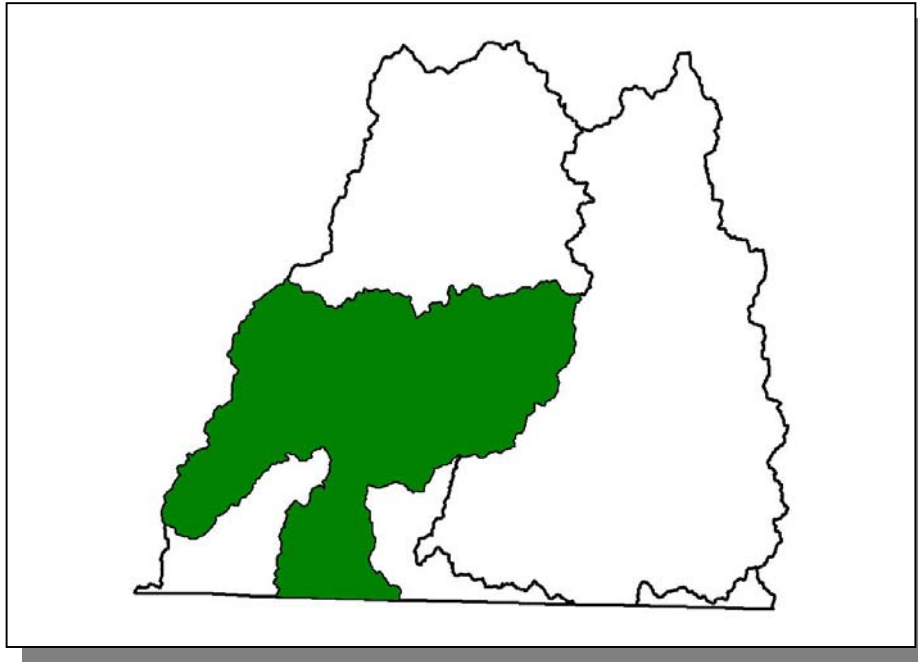


Figure 4-14. Location of Subwatershed 0801020704. All Little Hatchie River HUC-10 subwatershed boundaries in Tennessee are shown for reference.

4.2.B.i. 080102070401 (Hatchie River).

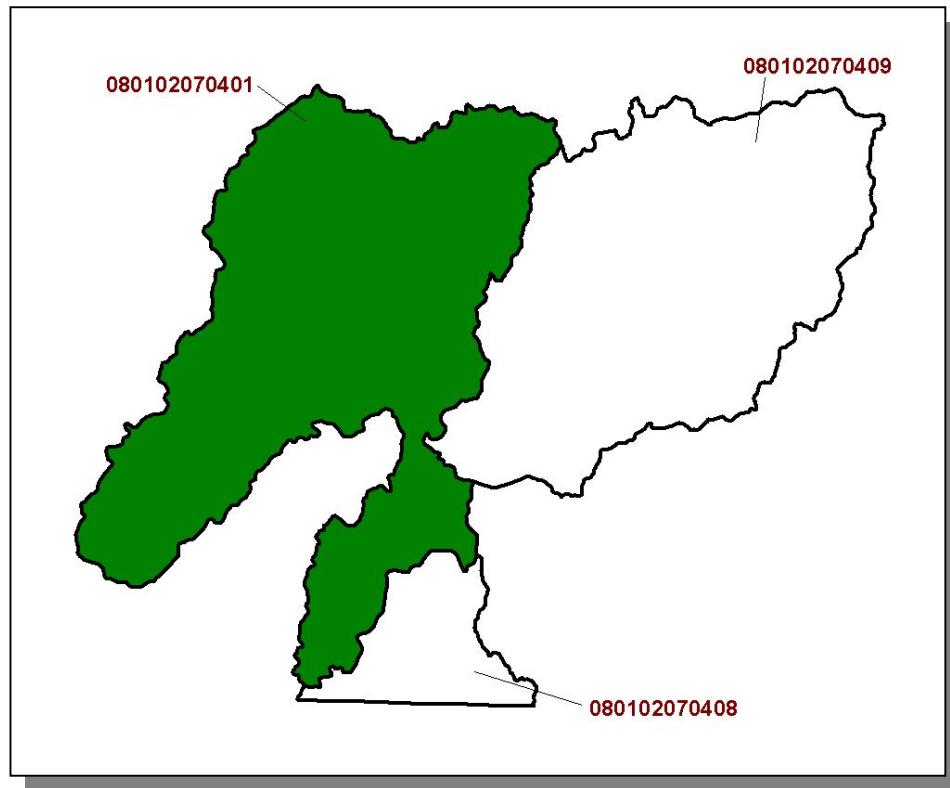


Figure 4-15. Location of Subwatershed 080102070401. All HUC-12 subwatershed boundaries in Tennessee are shown for reference.

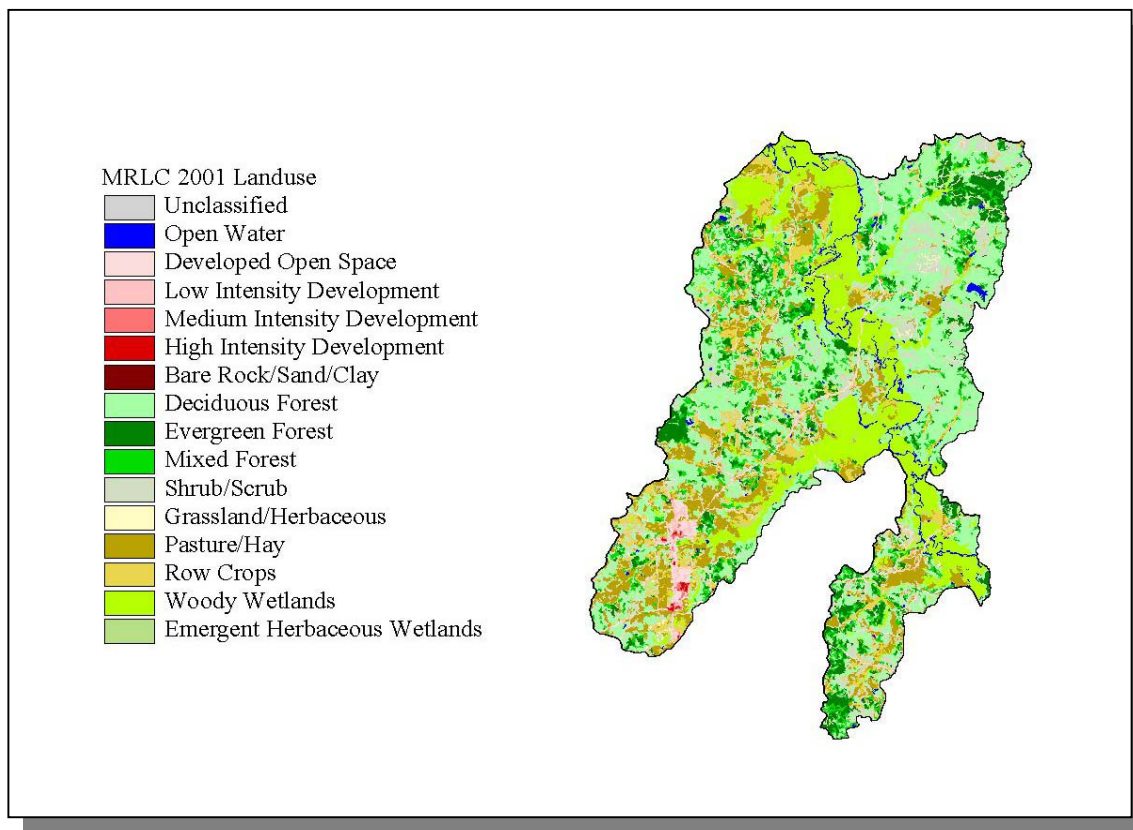


Figure 4-16. Illustration of Land Use Distribution in Subwatershed 080102070401.

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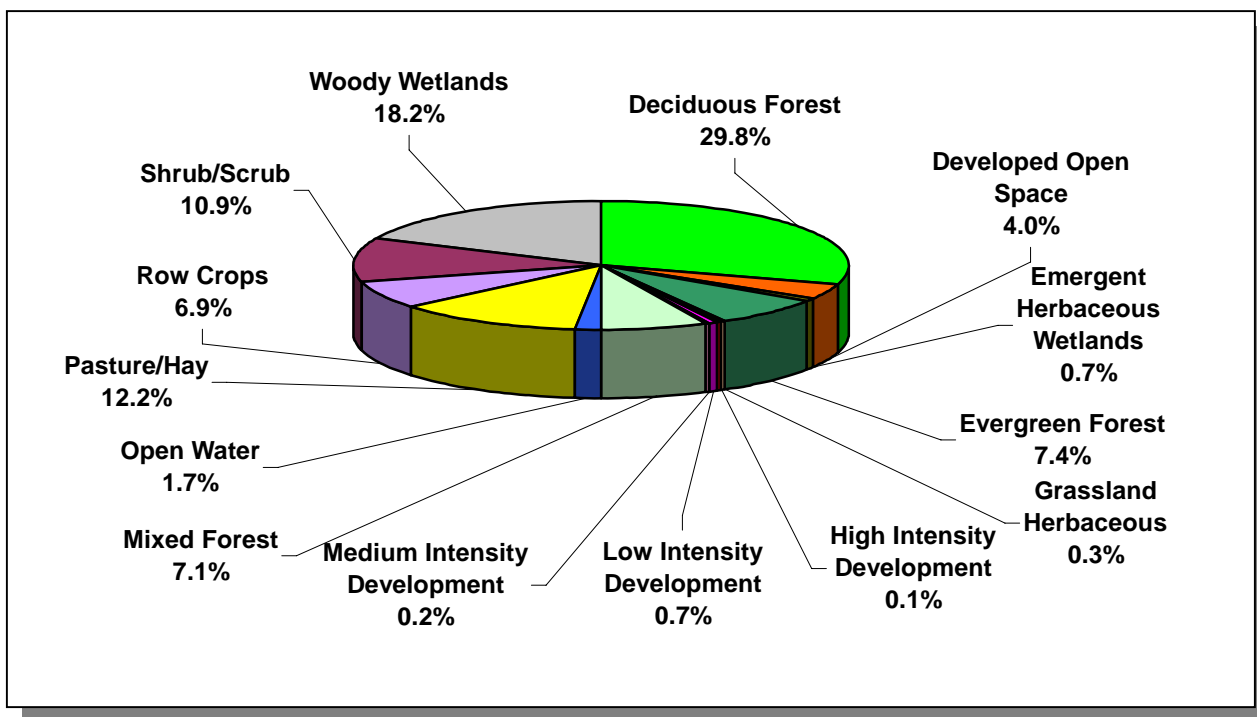


Figure 4-17. Land Use Distribution in Subwatershed 080102070401. More information is provided in Appendix IV.

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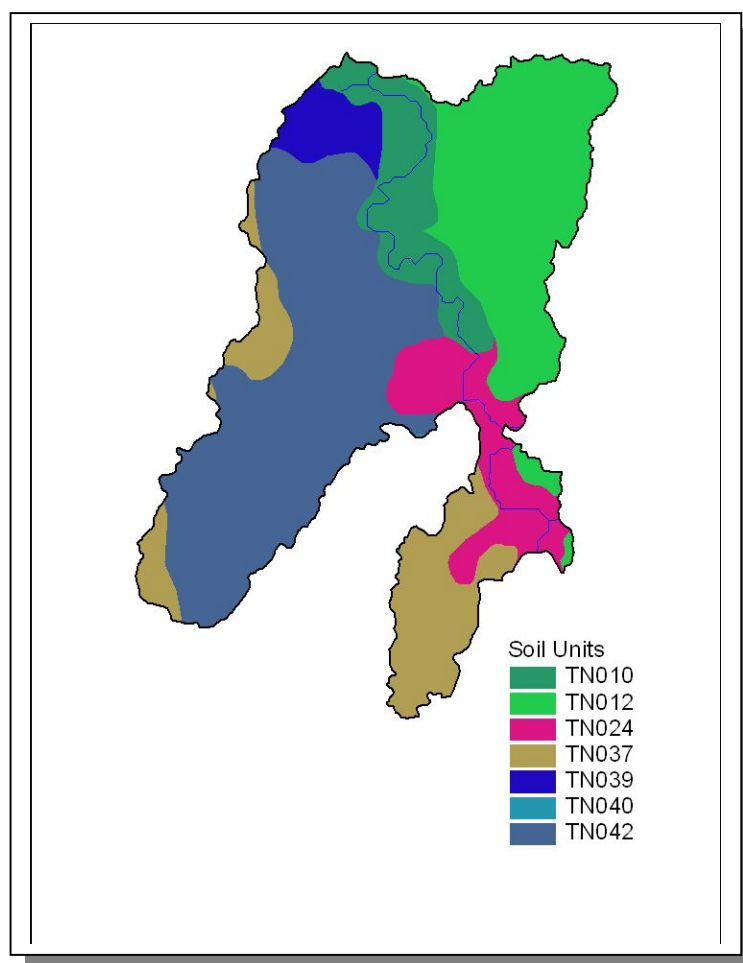


Figure 4-18. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102070401.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN010	81.00	C	1.33	5.11	Silty Loam	0.44
TN012	1.00	C	2.52	5.13	Silty Loam	0.39
TN024	61.00	D	2.18	5.35	Loam	0.29
TN037	0.00	C	3.51	4.86	Sandy Loam	0.27
TN039	24.00	C	1.35	5.20	Silty Loam	0.47
TN040	40.00	C	1.33	5.18	Silty Loam	0.38
TN042	0.00	C	2.53	5.11	Silty Loam	0.34

Table 4-22. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102070401. The definition of "Hydrologic Group" is provided in Appendix IV.

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County	COUNTY POPULATION			Portion of Watershed (%)	ESTIMATED POPULATION IN WATERSHED			% Change (1990-2000)
	1990	1997	2000		1990	1997	2000	
Hardeman	23,377	24,702	28,105	7.79	1,820	1,923	2,188	20.2
Mcnairy	22,422	23,678	24,653	1.31	293	310	322	9.9
Total	45,799	48,380	52,758		2,113	2,233	2,510	18.8

Table 4-23. Population Estimates in Subwatershed 080102070401.

			NUMBER OF HOUSING UNITS			
Populated Place	County	Population	Total	Public Sewer	Septic Tank	Other
Middleton	Hardeman	531	258	213	45	0

Table 4-24. Housing and Sewage Disposal Practices of Select Communities in Subwatershed 080102070401.

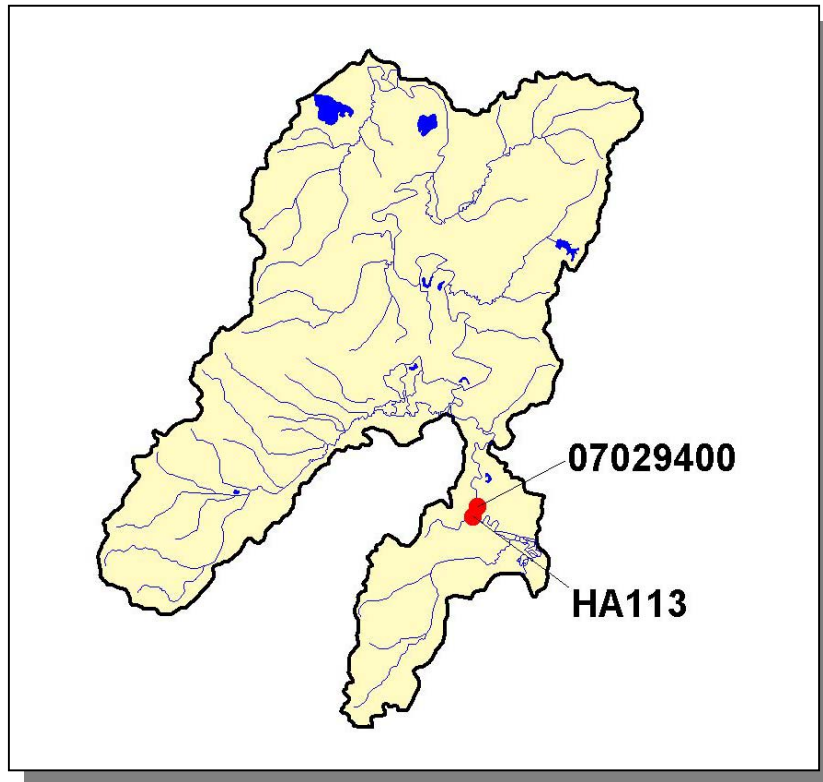


Figure 4-19. Location of Historical Streamflow Data Collection Sites in Subwatershed 080102070401. More information is provided in Appendix IV.

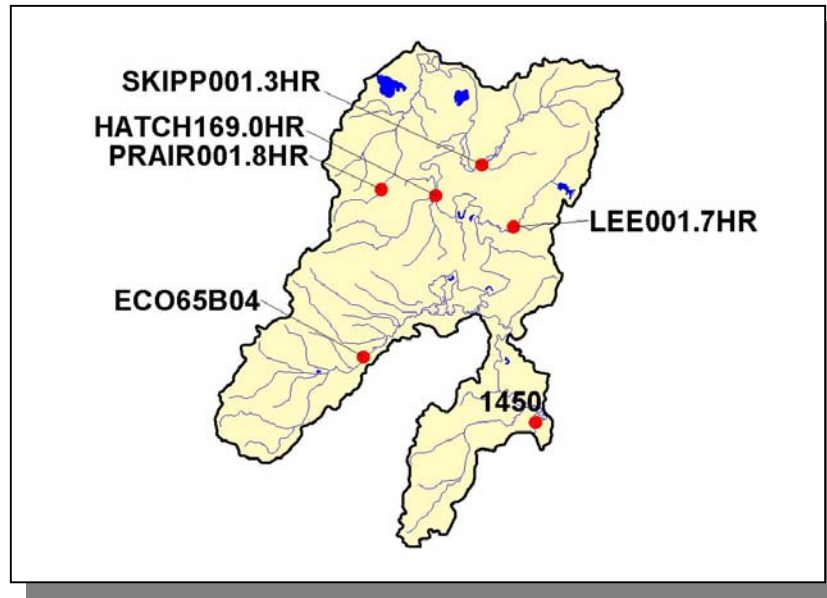


Figure 4-20. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 080102070401. More information, including site names and locations, is provided in Appendix IV.

4.2.B.i.a. Point Source Contributions.

There are no point source contributions in this subwatershed.

4.2.B.i.b. Nonpoint Source Contributions.

LIVESTOCK COUNTS					
Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
1,306	2,258	9	<5	754	20

Table 4-25. Summary of Livestock Count Estimates in Subwatershed 080102070401. According to the 1997 Census of Agriculture (<http://www.nass.usda.gov/census/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

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LIVESTOCK COUNTS						
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
Hardeman	9,184	15,877	62	28	5,221	144
McNairy	5,659	10,365	7	491	11,346	98

Table 4-26. Summary of Livestock Count Estimates in Hardeman and McNairy Counties.
According to the 1997 Census of Agriculture (<http://www.nass.usda.gov/census/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

County	INVENTORY		REMOVAL RATE	
	Forest Land (thousand acres)	Timber Land (thousand acres)	Growing Stock (million cubic feet)	Sawtimber (million board feet)
Hardeman	247.1	247.1	5.0	18.6
McNairy				

Table 4-27. Forest Acreage and Annual Removal Rates (1987-1994) in Hardeman and McNairy County.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	1.15
Grass (Hayland)	0.35
Legumes, Grass (Hayland)	0.07
Legumes (Hayland)	0.13
Grass, Forbs, Legumes (Mixed Pasture)	1.01
Corn (Row Crops)	11.35
Cotton (Row Crops)	23.26
Sorghum (Row Crops)	3.11
Soybeans (Row Crops)	12.49
Wheat (Close-Grown Cropland)	13.42
Summer Fallow (Other Cropland)	6.11
Other Cropland not Planted	3.99
Conservation Reserve Program Lands	0.28
Farmsteads and Ranch Headquarters	0.86

Table 4-28. Annual Estimated Total Soil Loss in Subwatershed 080102070401.

4.2.B.ii. 080102070408 (Hatchie River).

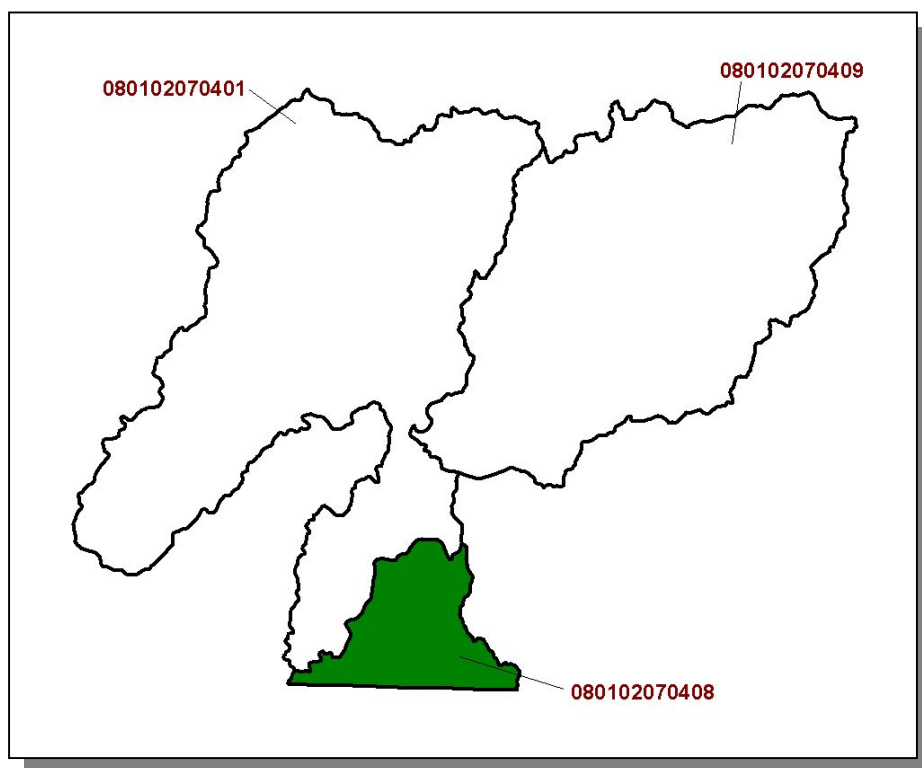


Figure 4-21. Location of Subwatershed 080102070408. All HUC-12 subwatershed boundaries in Tennessee are shown for reference.

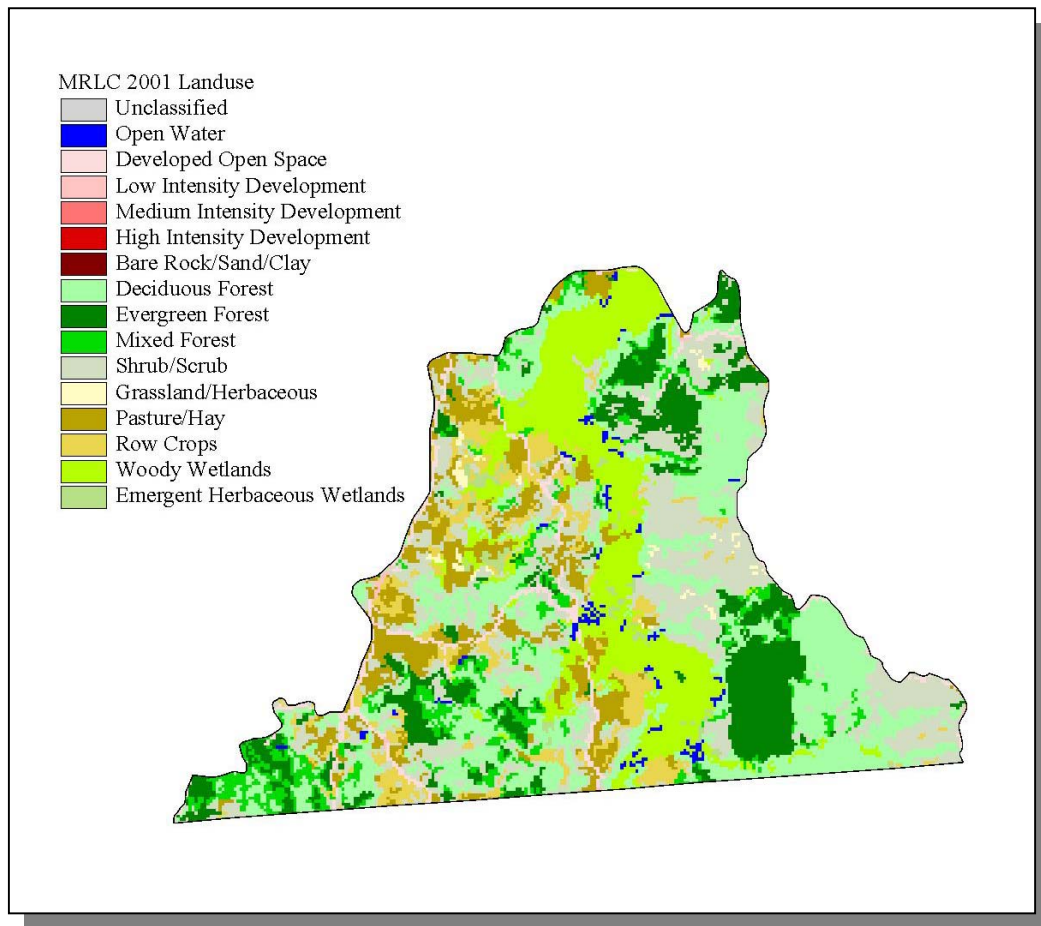


Figure 4-22. Illustration of Land Use Distribution in Subwatershed 080102070408.

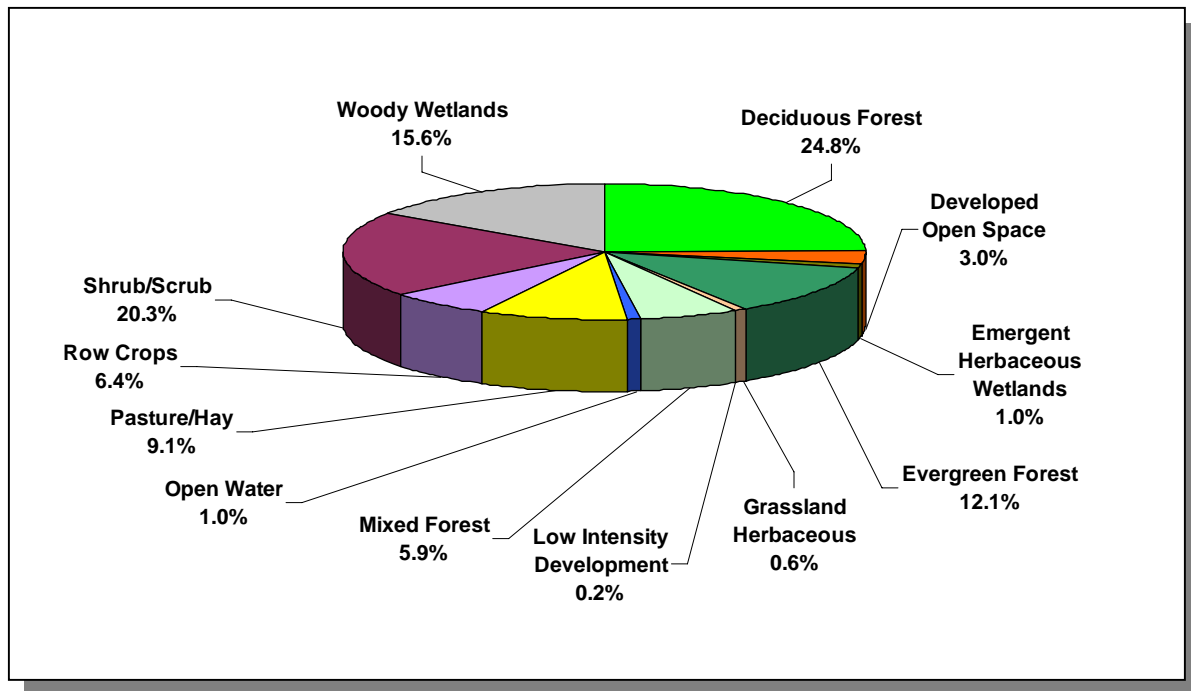


Figure 4-23. Land Use Distribution in Subwatershed 080102070408. More information is provided in Appendix IV.

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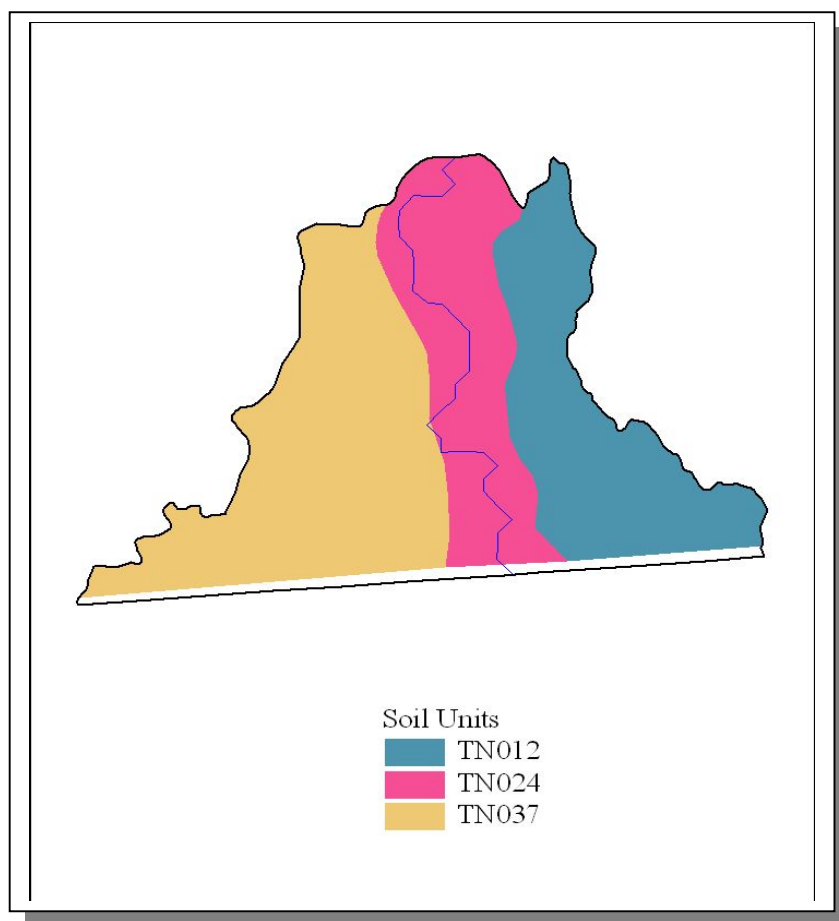


Figure 4-24. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102070408.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN012	1.00	C	2.52	5.13	Silty Loam	0.39
TN024	61.00	D	2.18	5.35	Loam	0.29
TN037	0.00	C	3.51	4.86	Sandy Loam	0.27

Table 4-29. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102070408. The definition of "Hydrologic Group" is provided in Appendix IV.

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County	COUNTY POPULATION			Portion of Watershed (%)	ESTIMATED POPULATION IN WATERSHED			% Change (1990-2000)
	1990	1997	2000		1990	1997	2000	
Hardeman	23,377	24,702	28,105	0.61	142	150	171	20.4
McNairy	22,422	23,678	24,653	0.33	75	79	82	9.3
Total	45,799	48,380	52,758		217	229	253	16.6

Table 4-30. Population Estimates in Subwatershed 080102070408.

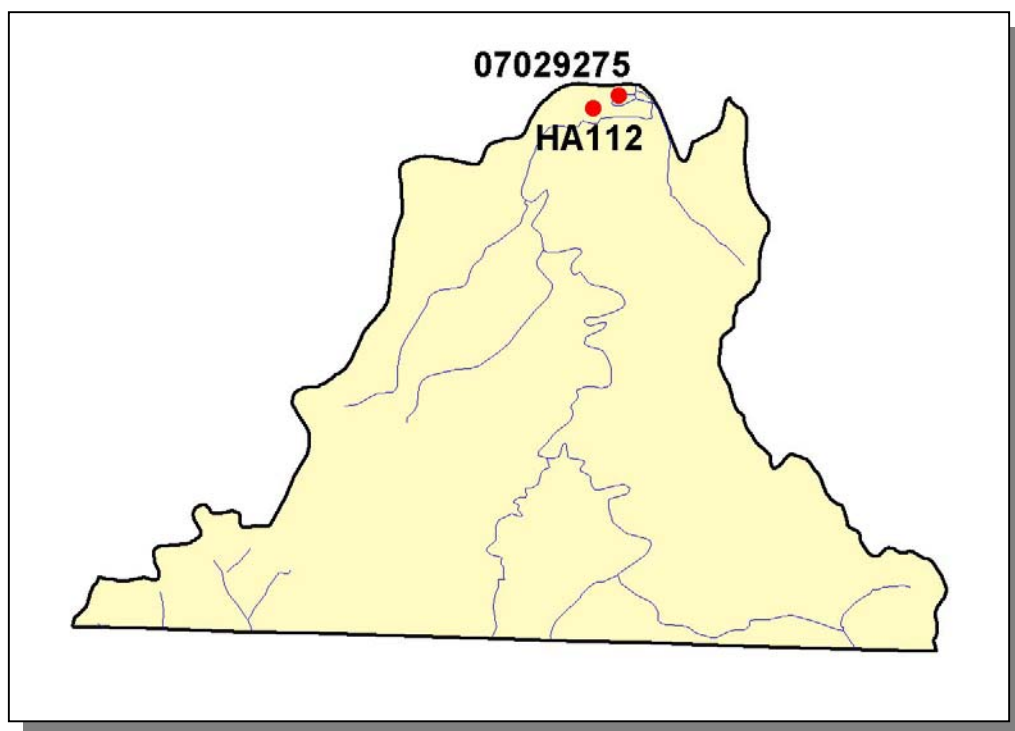


Figure 4-25. Location of Historical Streamflow Data Collection Sites in Subwatershed 080102070408. More information is provided in Appendix IV.

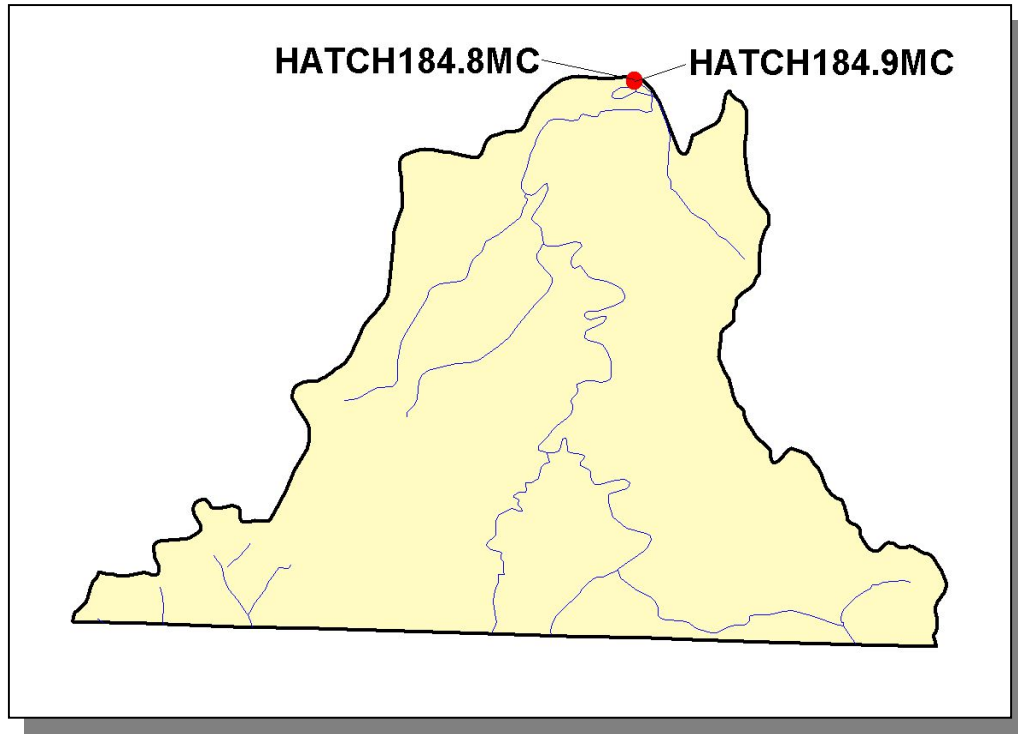


Figure 4-26. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 080102070408. More information, including site names and locations, is provided in Appendix IV.

4.2.B.ii.a. Point Source Contributions.

There are no point source contributions in this subwatershed.

4.2.B.ii.b. Nonpoint Source Contributions.

LIVESTOCK COUNTS					
Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
177	309	<5	<5	95	<5

Table 4-31. Summary of Livestock Count Estimates in Subwatershed 080102070408. According to the 1997 Census of Agriculture (<http://www.nass.usda.gov/census/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

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LIVESTOCK COUNTS						
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
Hardeman	9,184	15,877	62	28	5,221	144
McNairy	5,659	10,365	7	491	11,346	98

Table 4-32. Summary of Livestock Count Estimates in Hardeman and McNairy Counties. According to the 1997 Census of Agriculture (<http://www.nass.usda.gov/census/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

	INVENTORY		REMOVAL RATE	
County	Forest Land (thousand acres)	Timber Land (thousand acres)	Growing Stock (million cubic feet)	Sawtimber (million board feet)
Hardeman	247.1	247.1	5.0	18.6
McNairy				

Table 4-33. Forest Acreage and Annual Removal Rates (1987-1994) in Hardeman and McNairy Counties.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	0.95
Grass (Hayland)	0.53
Legumes, Grass (Hayland)	0.07
Legumes (Hayland)	0.40
Grass, Forbs, Legumes (Mixed Pasture)	0.94
Corn (Row Crops)	9.76
Cotton (Row Crops)	17.22
Sorghum (Row Crops)	3.22
Soybeans (Row Crops)	10.19
Wheat (Close-Grown Cropland)	10.90
Summer Fallow (Other Cropland)	6.11
Other Cropland not Planted	3.09
Conservation Reserve Program Lands	0.68
Farmsteads and Ranch Headquarters	0.56

Table 4-34. Annual Estimated Total Soil Loss in Subwatershed 080102070408.

4.2.B.iii. 080102070409 (Mosses Creek).

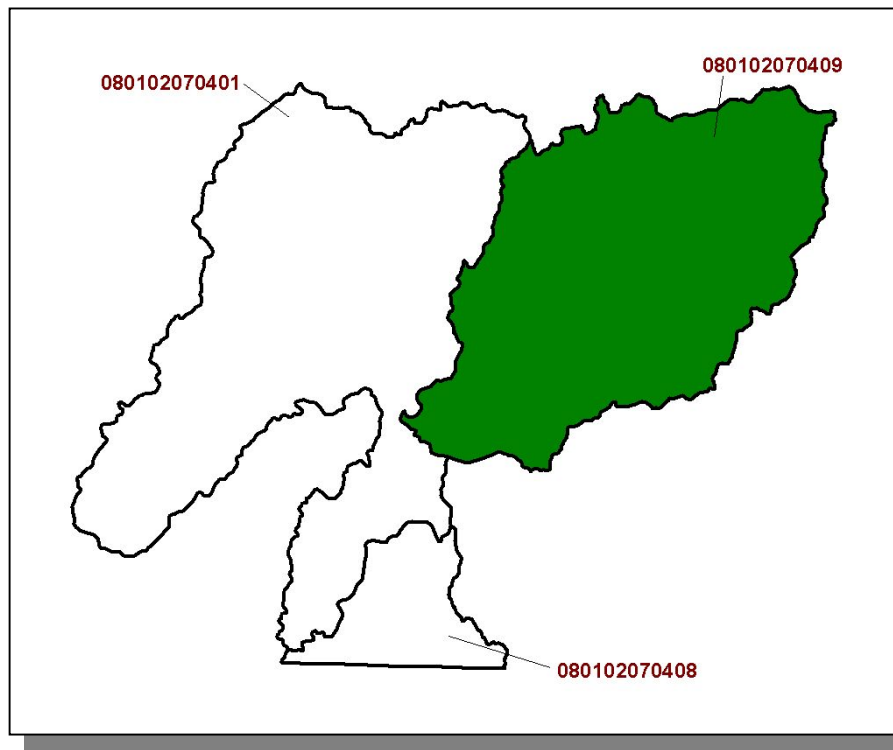


Figure 4-27. Location of Subwatershed 080102070409. All HUC-12 subwatershed boundaries are shown for reference.

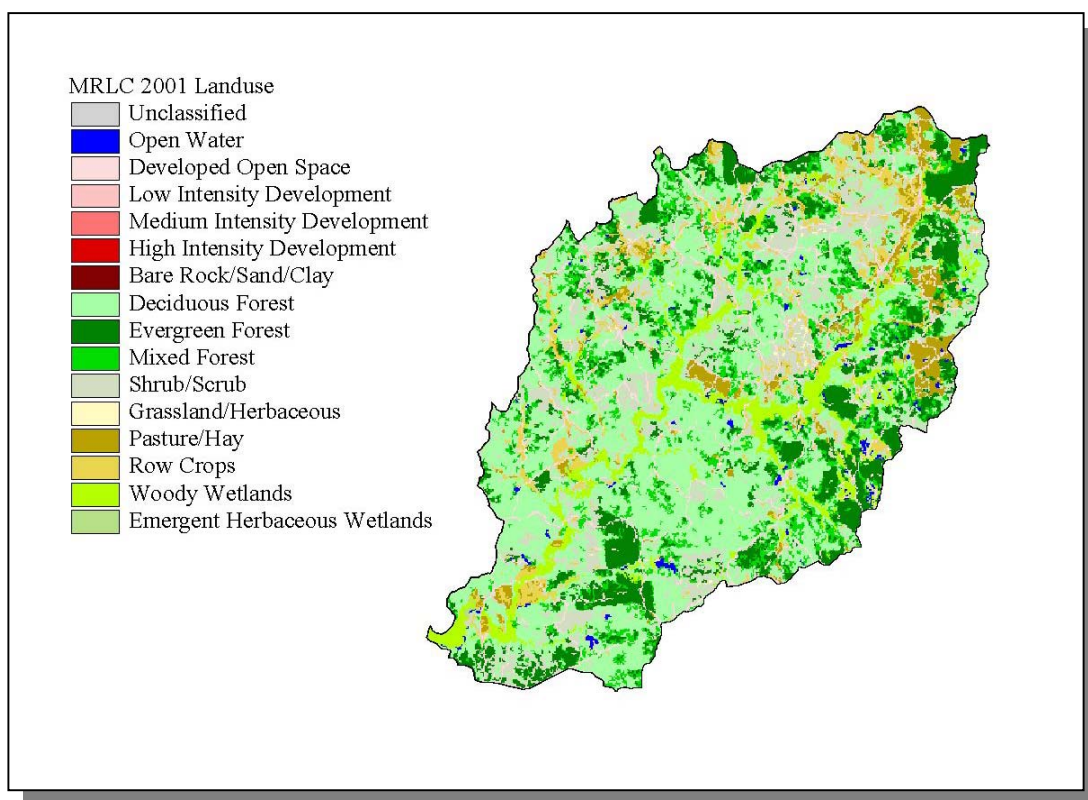


Figure 4-28. Illustration of Land Use Distribution in Subwatershed 080102070409.

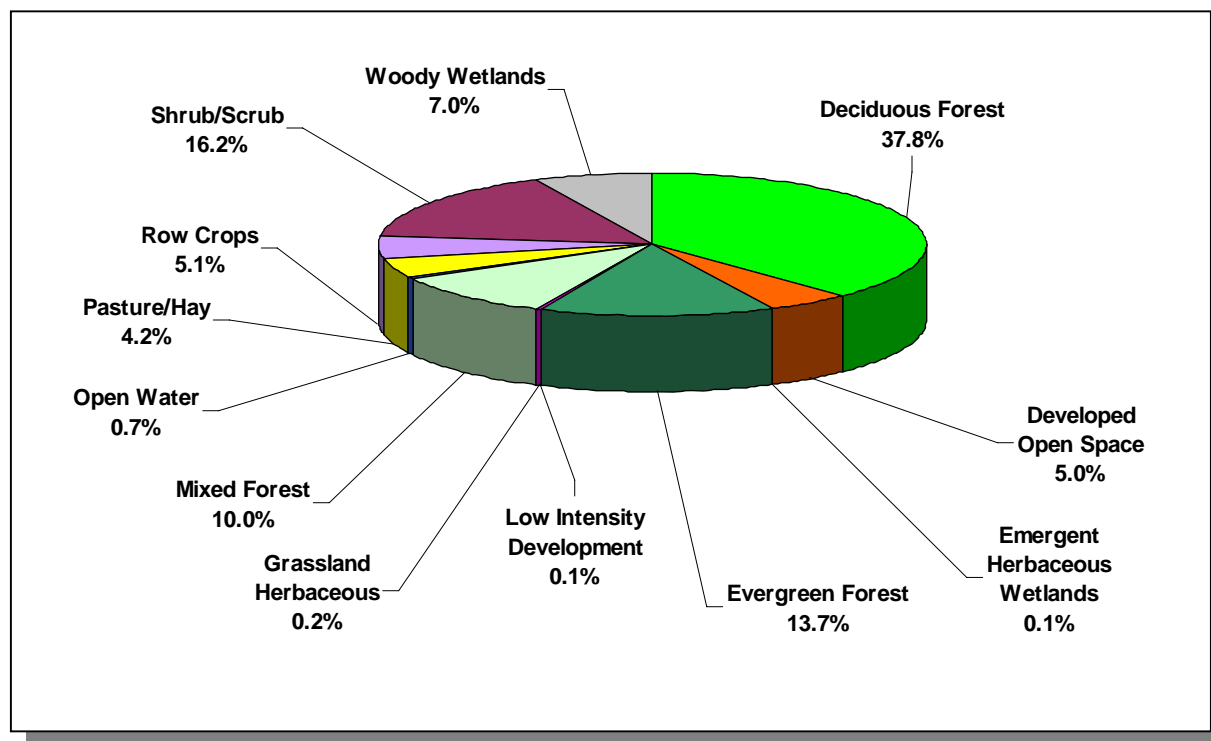


Figure 4-29. Land Use Distribution in Subwatershed 080102070409. More information is provided in Appendix IV.

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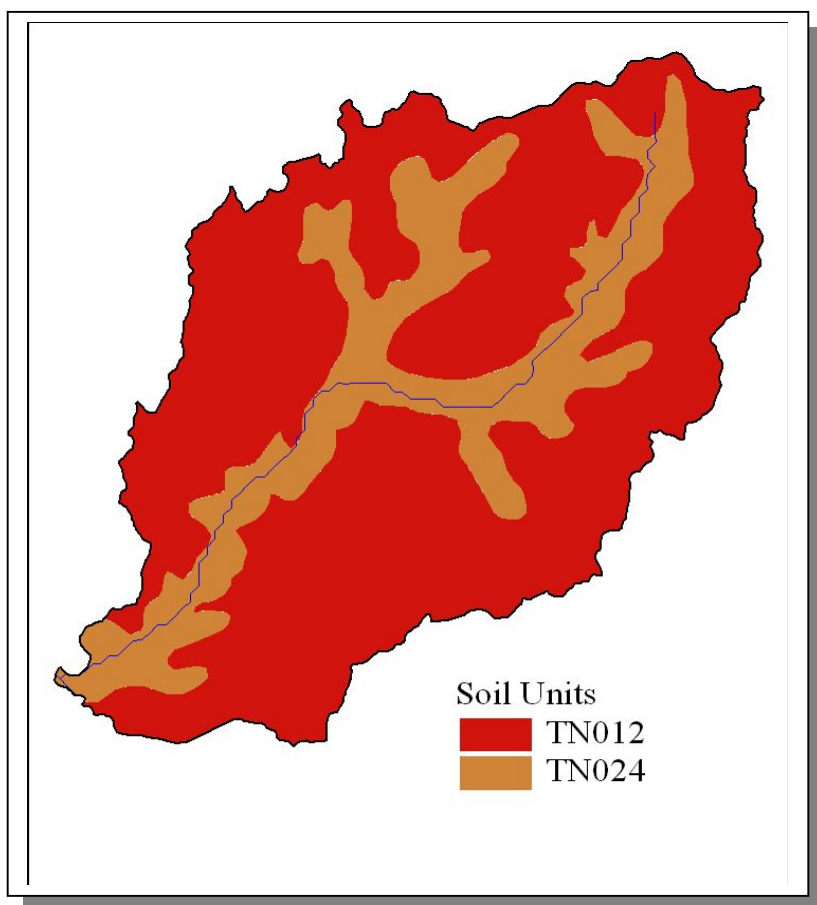


Figure 4-30. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102070409.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN012	1.00	C	2.52	5.13	Silty Loam	0.39
TN024	61.00	D	2.18	5.35	Loam	0.29

Table 4-35. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102070409. The definition of "Hydrologic Group" is provided in Appendix IV.

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County	COUNTY POPULATION			Portion of Watershed (%)	ESTIMATED POPULATION IN WATERSHED			% Change (1990-2000)
	1990	1997	2000		1990	1997	2000	
Hardeman	23,377	24,702	28,105	0.06	15	16	18	20
McNairy	22,422	23,678	24,653	8.61	1,932	2,040	2,124	9.9
Total	45,799	48,380	52,758		1,947	2,056	2,142	10.0

Table 4-36. Population Estimates in Subwatershed 080102070409.

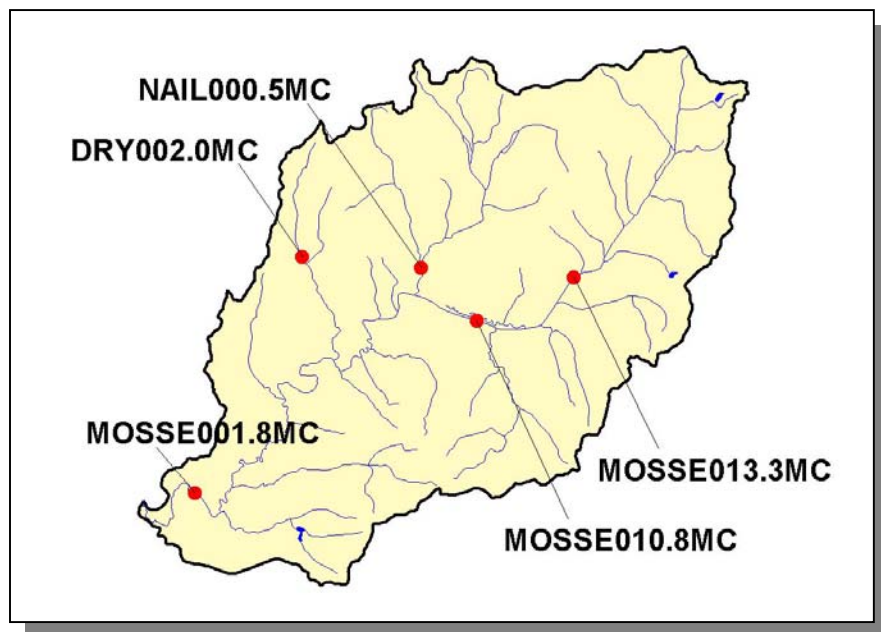


Figure 4-31. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 080102070409. More information, including site names and locations, is provided in Appendix IV.

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4.2.B.iii.a. Point Source Contributions.

There are no point source contributions in this subwatershed.

4.2.B.iii.b. Nonpoint Source Contributions.

LIVESTOCK COUNTS				
Beef Cow	Cattle	Chickens (Layers)	Hogs	Sheep
254	465	<5	506	<5

Table 4-37. Summary of Livestock Count Estimates in Subwatershed 080102070409. According to the 1997 Census of Agriculture (<http://www.nass.usda.gov/census/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older; "Chickens Sold" are all chickens used to produce meat.

LIVESTOCK COUNTS						
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
Hardeman	9,184	15,877	62	28	5,221	144
McNairy	5,659	10,365	7	491	11,346	98

Table 4-38. Summary of Livestock Count Estimates in Hardeman and McNairy Counties. According to the 1997 Census of Agriculture (<http://www.nass.usda.gov/census/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

County	INVENTORY		REMOVAL RATE	
	Forest Land (thousand acres)	Timber Land (thousand acres)	Growing Stock (million cubic feet)	Sawtimber (million board feet)
Hardeman	247.1	247.1	5.0	18.6
McNairy				

Table 4-39. Forest Acreage and Annual Removal Rates (1987-1994) in Hardeman and McNairy Counties.

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CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	0.56
Grass (Hayland)	0.06
Legumes, Grass (Hayland)	0.07
Legumes (Hayland)	0.12
Grass, Forbs, Legumes (Mixed Pasture)	0.59
Corn (Row Crops)	11.03
Cotton (Row Crops)	5.63
Sorghum (Row Crops)	3.61
Soybeans (Row Crops)	9.79
Wheat (Close-Grown Cropland)	2.03
Summer Fallow (Other Cropland)	6.11
Other Cropland not Planted	2.29
Conservation Reserve Program Lands	0.28
Farmsteads and Ranch Headquarters	0.11

Table 4-40. Annual Estimated Total Soil Loss in Subwatershed 080102070409.

4.2.C. 0801020705.

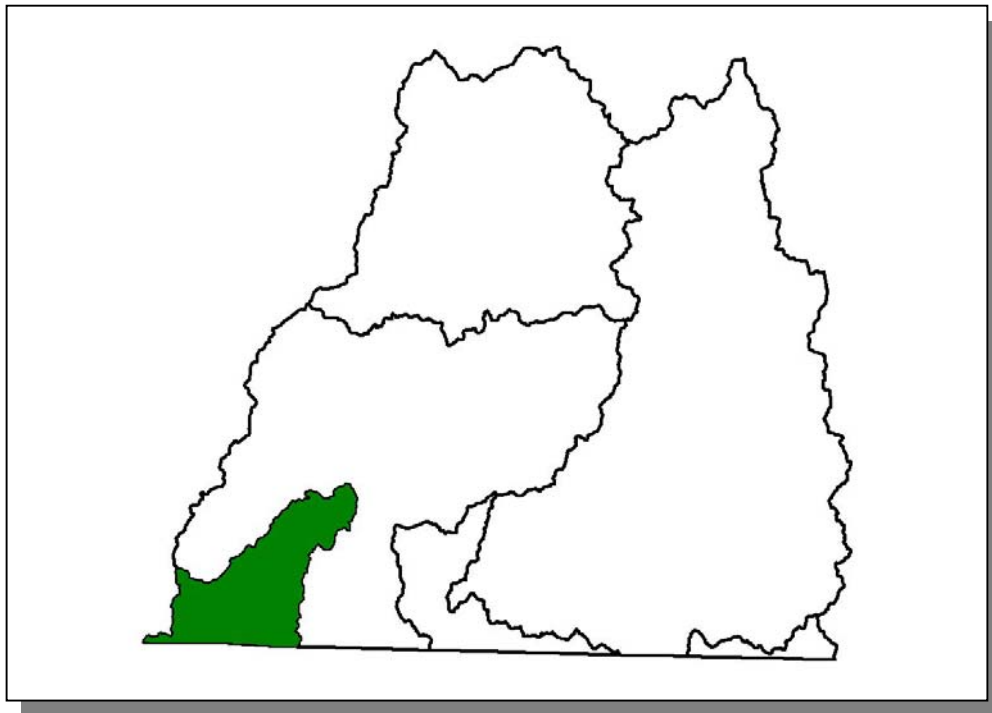


Figure 4-32. Location of Subwatershed 0801020705. All Little Hatchie River HUC-10 subwatershed boundaries in Tennessee are shown for reference.

4.2.C.i. 080102070501 (Muddy Creek).



Figure 4-33. Location of Subwatershed 080102070501. All HUC-12 subwatershed boundaries are shown for reference.

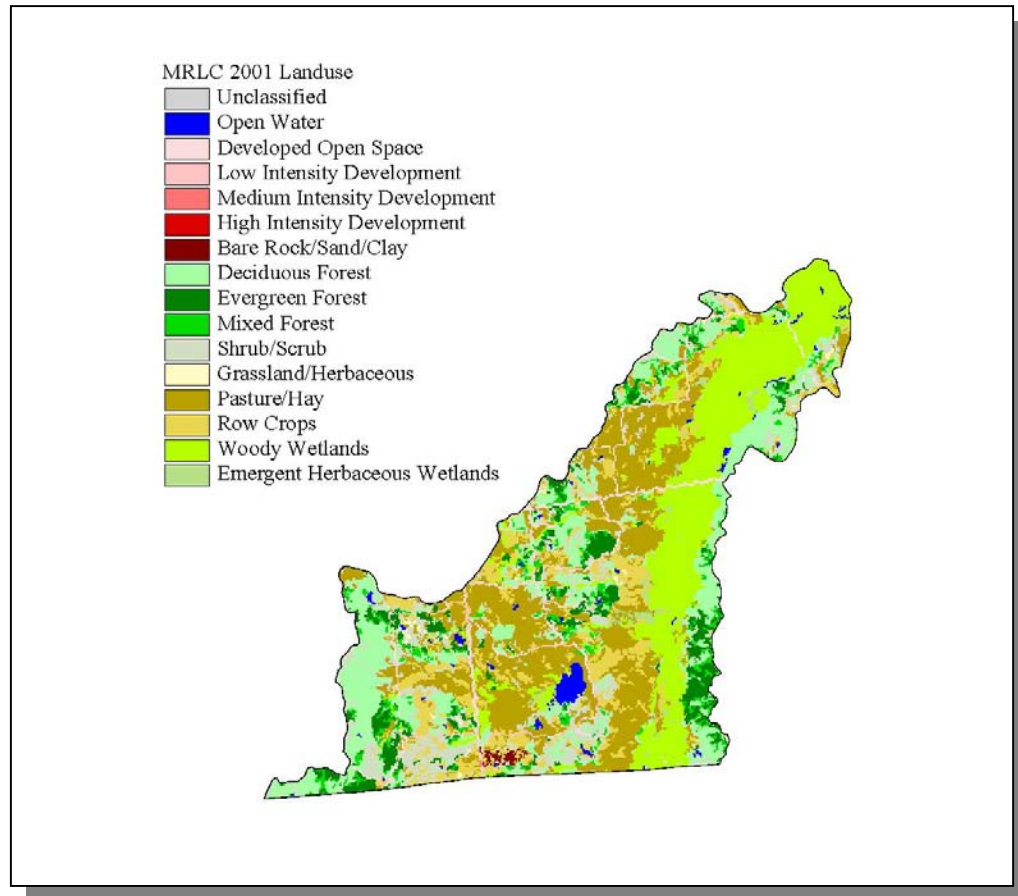


Figure 4-34. Illustration of Land Use Distribution in Subwatershed 080102070501.

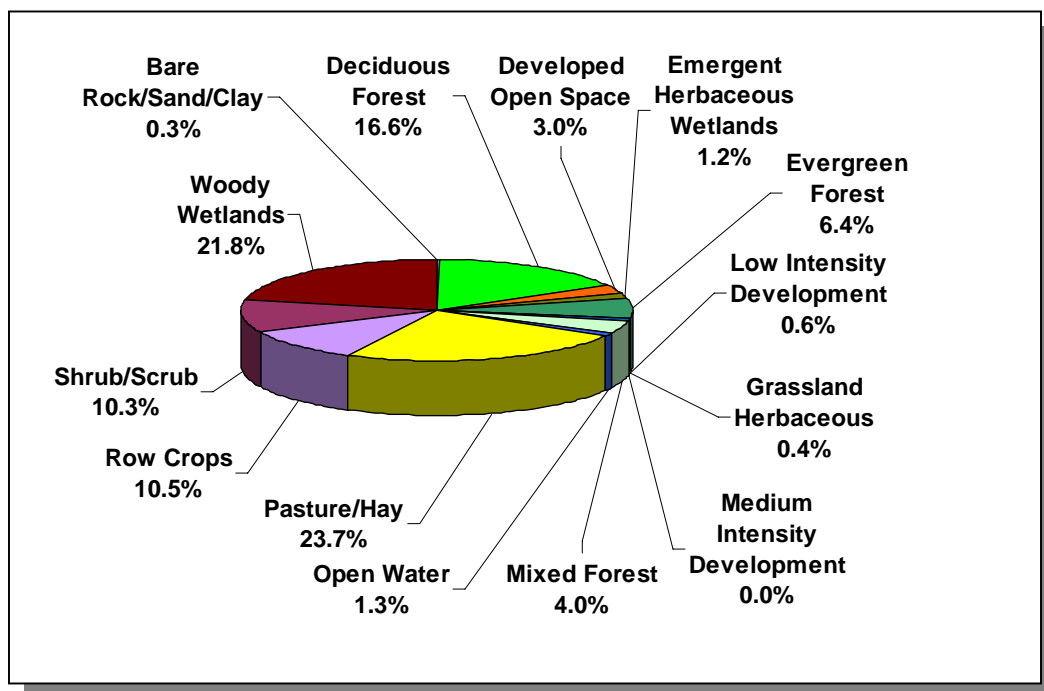


Figure 4-35. Land Use Distribution in Subwatershed 080102070501. More information is provided in Appendix IV.

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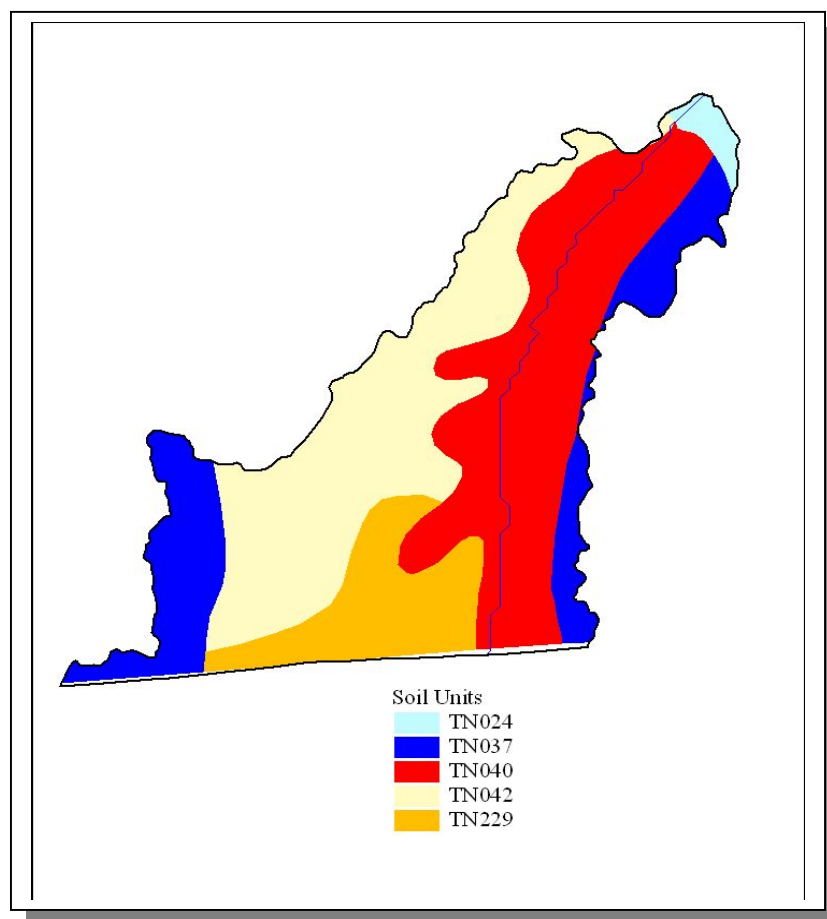


Figure 4-36. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102070501.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN024	61.00	D	2.18	5.35	Loam	0.29
TN037	0.00	C	3.51	4.86	Sandy Loam	0.27
TN040	40.00	C	1.33	5.18	Silty Loam	0.38
TN042	0.00	C	2.53	5.11	Silty Loam	0.34
TN229	2.00	C	0.72	5.03	Silty Loam	0.39

Table 4-41. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102070501. The definition of "Hydrologic Group" is provided in Appendix IV.

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County	COUNTY POPULATION			Portion of Watershed (%)	ESTIMATED POPULATION IN WATERSHED			% Change (1990-2000)
	1990	1997	2000		1990	1997	2000	
Hardeman	23,377	24,702	28,105	2.71	634	670	763	20.3

Table 4-42. Population Estimates in Subwatershed 080102070501.

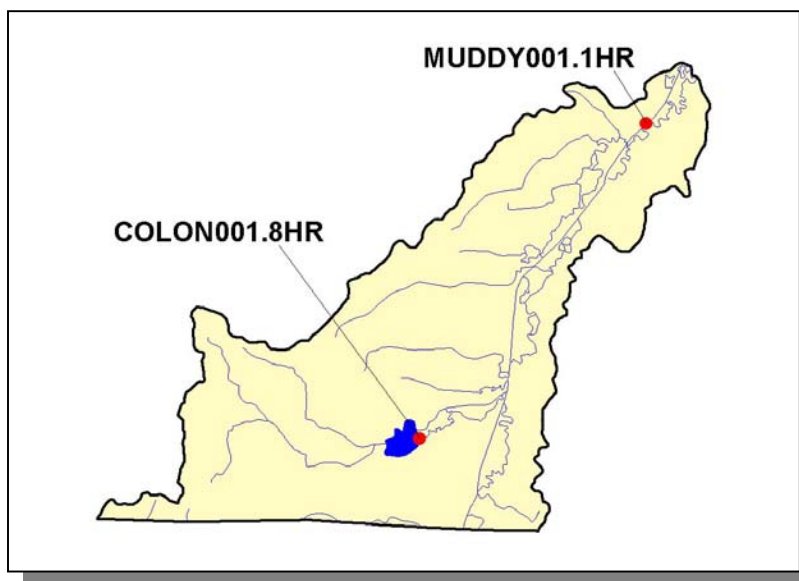


Figure 4-37. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 080102070501. More information, including site names and locations, is provided in Appendix IV.

4.2.C.i.a. Point Source Contributions.

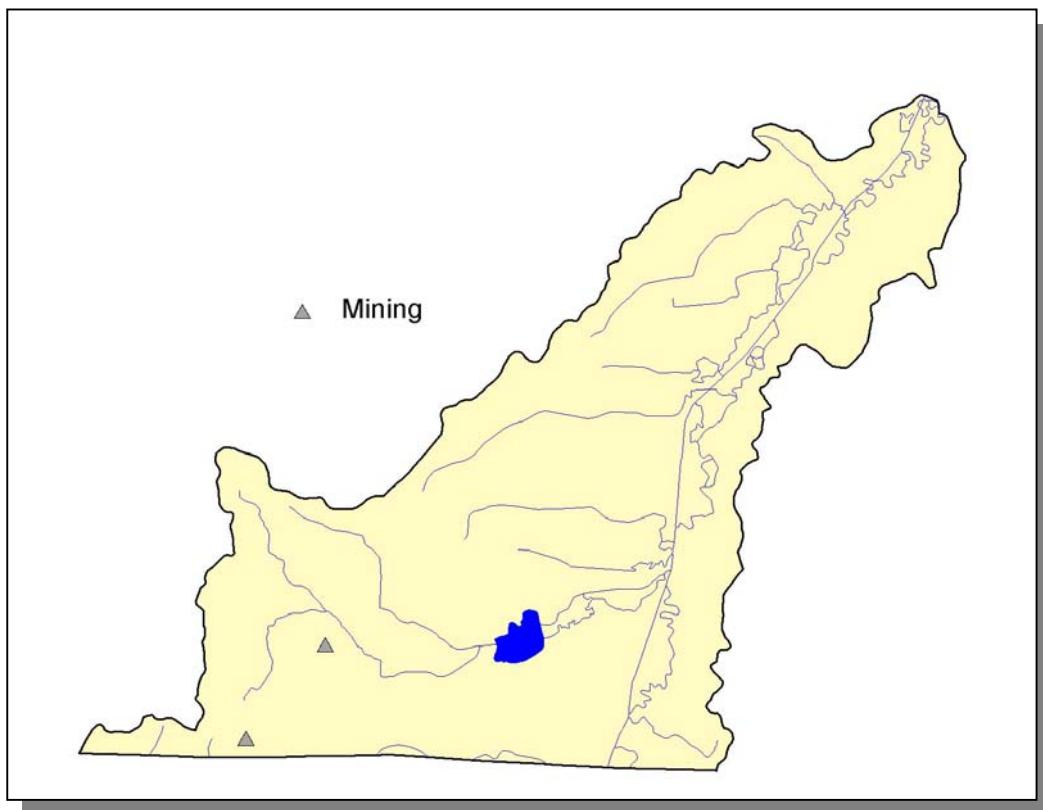


Figure 4-38. Location of Permits Issued in Subwatershed 080102070501. More information, including the names of facilities, is provided in Appendix IV.

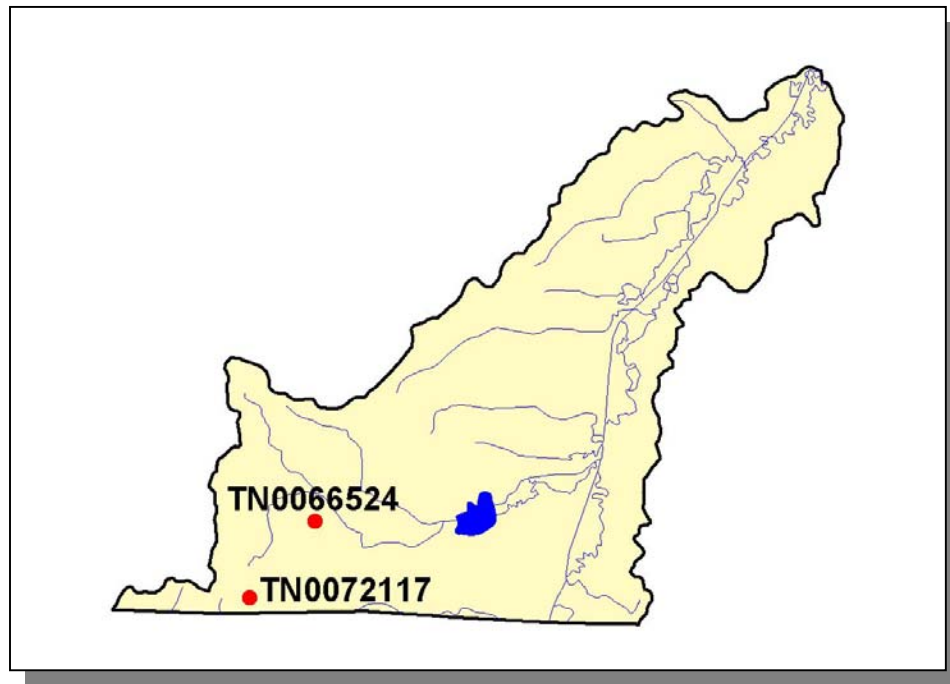


Figure 4-39. Location of Active Mining Sites in Subwatershed 080102070501. More information, including the names of mining operations, is provided in Appendix IV.

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4.2.C.i.b. Nonpoint Source Contributions.

LIVESTOCK COUNTS					
Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
796	1,378	6	<5	440	12

Table 4-43. Summary of Livestock Count Estimates in Subwatershed 080102070501. According to the 1997 Census of Agriculture (<http://www.nass.usda.gov/census/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

LIVESTOCK COUNTS						
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
Hardeman	9,184	15,877	62	28	5,221	144

Table 4-44. Summary of Livestock Count Estimates in Hardeman County. According to the 1997 Census of Agriculture (<http://www.nass.usda.gov/census/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

County	INVENTORY		REMOVAL RATE	
	Forest Land (thousand acres)	Timber Land (thousand acres)	Growing Stock (million cubic feet)	Sawtimber (million board feet)
Hardeman	247.1	247.1	5.0	18.6

Table 4-45. Forest Acreage and Annual Removal Rates (1987-1994) in Hardeman County.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	1.22
Grass (Hayland)	0.40
Legumes (Hayland)	1.14
Grass, Forbs, Legumes (Mixed Pasture)	1.06
Corn (Row Crops)	10.45
Cotton (Row Crops)	23.16
Sorghum (Row Crops)	3.04
Soybeans (Row Crops)	11.89
Wheat (Close-Grown Cropland)	15.03
Summer Fallow (Other Cropland)	6.11
Other Cropland not Planted	3.98
Conservation Reserve Program Lands	0.85
Farmsteads and Ranch Headquarters	0.93

Table 4-46. Annual Estimated Total Soil Loss in Subwatershed 080102070501.

4.2.D. 0801020706

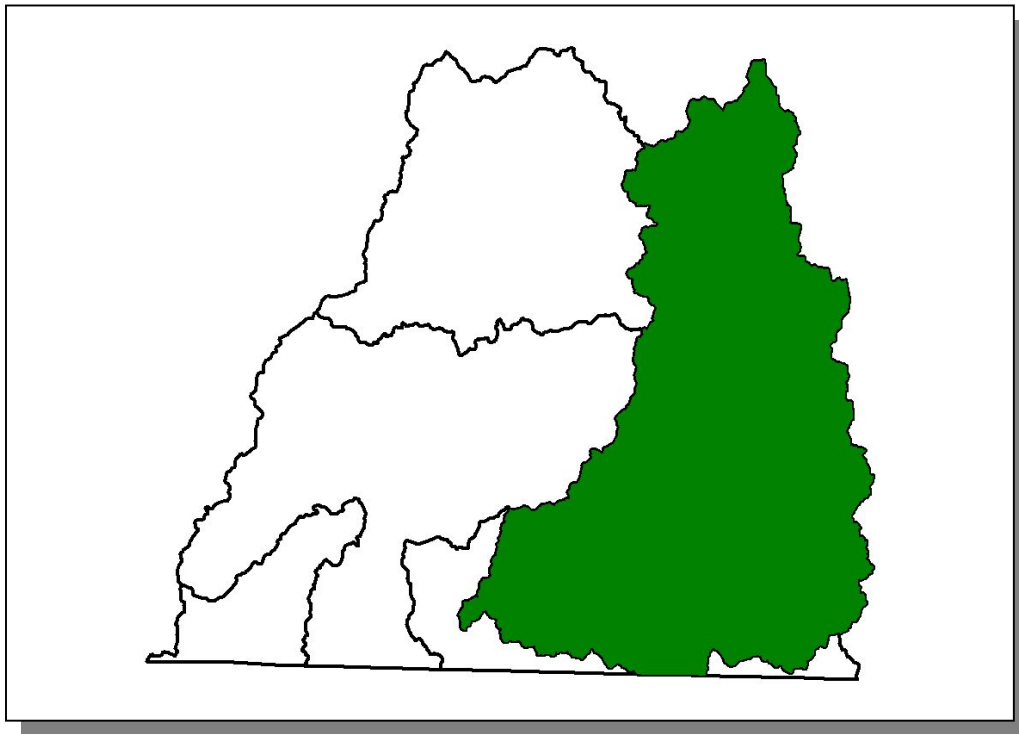


Figure 4-40. Location of Subwatershed 0801020706. All Little Hatchie River HUC-10 subwatershed boundaries in Tennessee are shown for reference.

4.2.D.i. 080102070601 (Upper Cypress Creek).

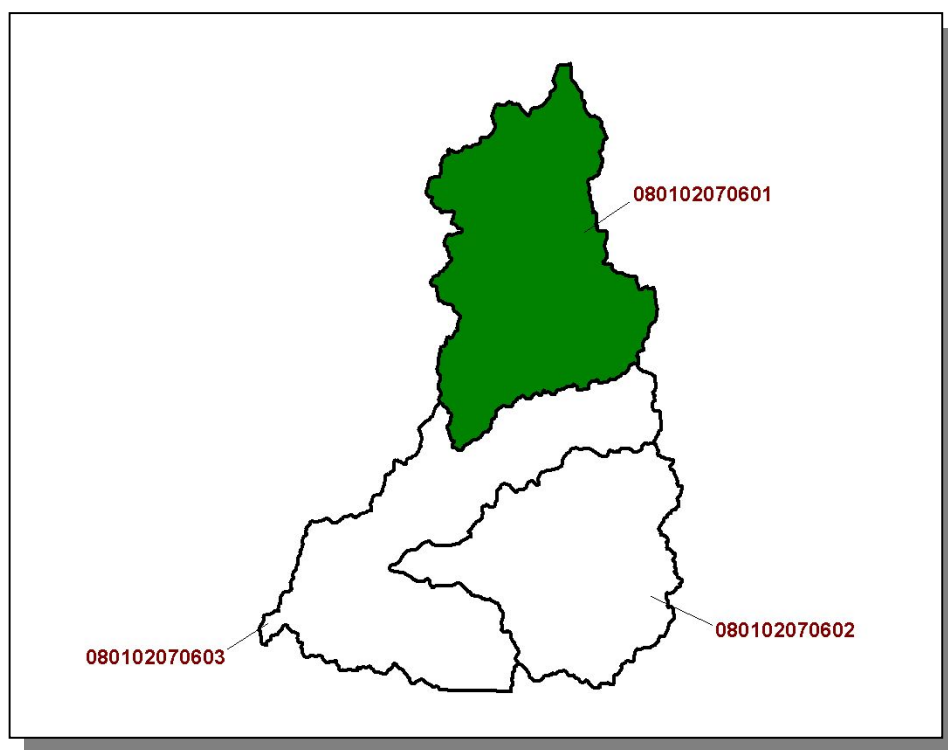


Figure 4-41. Location of Subwatershed 080102070601. All HUC-12 subwatershed boundaries are shown for reference.

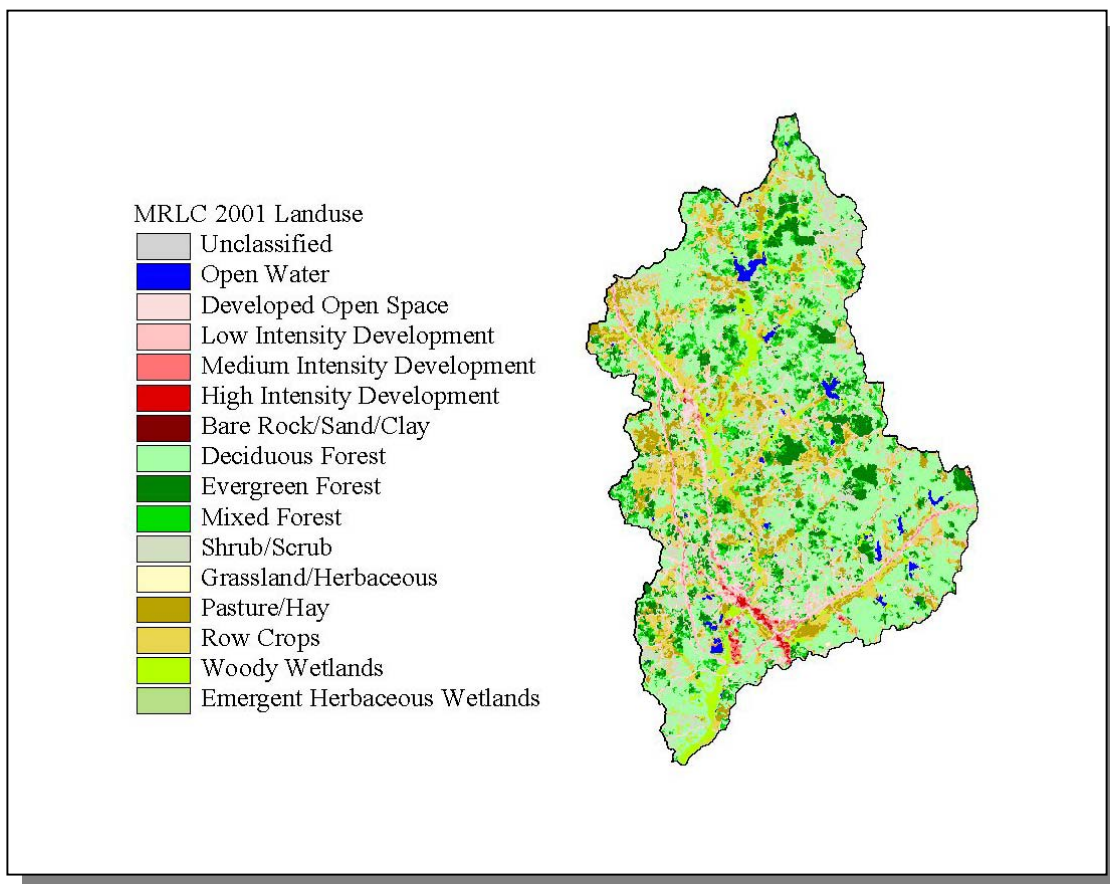


Figure 4-42. Illustration of Land Use Distribution in Subwatershed 080102070601.

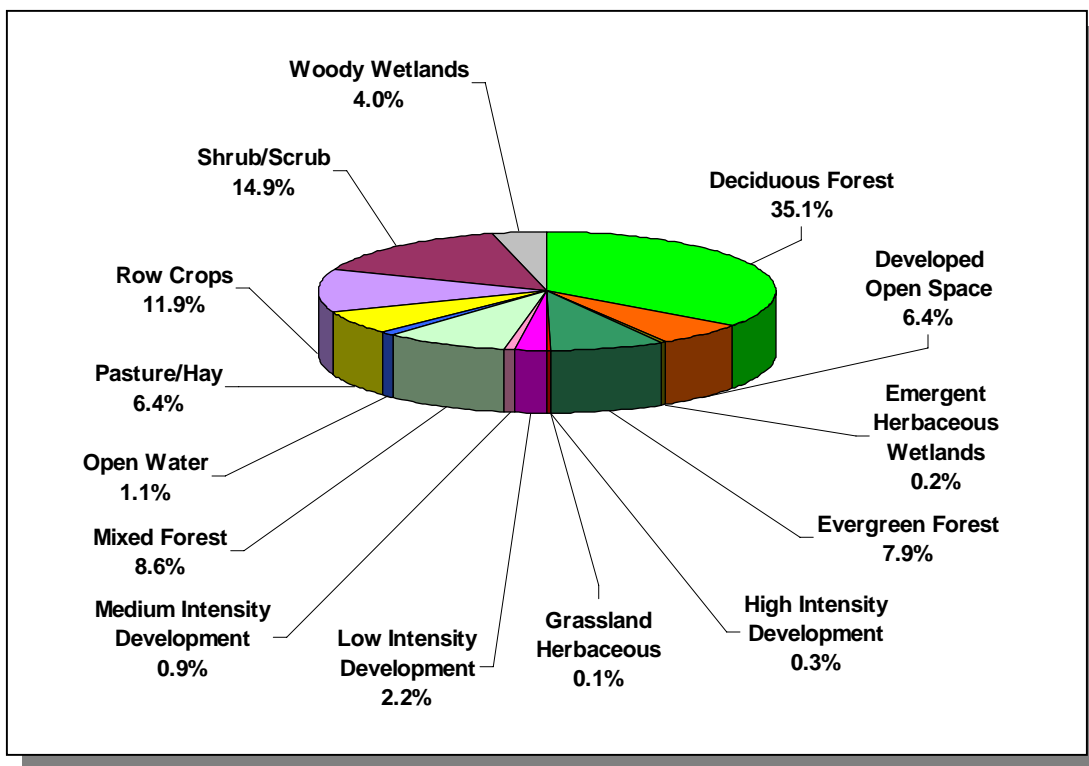


Figure 4-43. Land Use Distribution in Subwatershed 080102070601. More information is provided in Appendix IV.

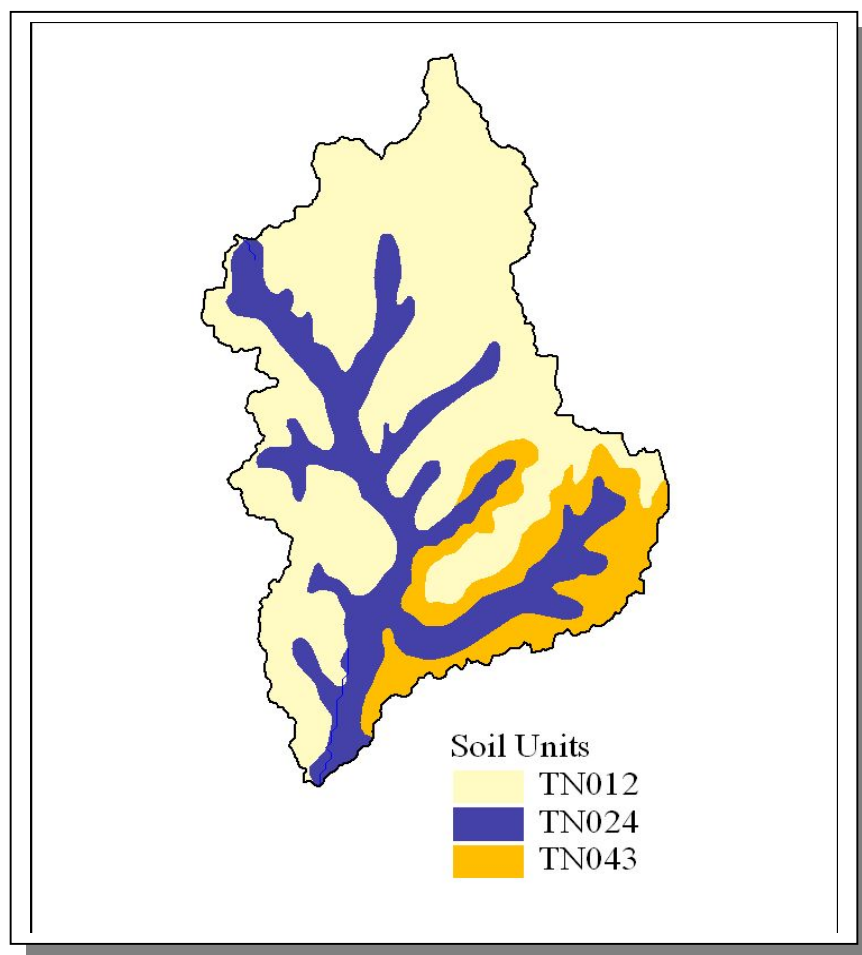


Figure 4-44. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102070601.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN012	1.00	C	2.52	5.13	Silty Loam	0.39
TN024	61.00	D	2.18	5.35	Loam	0.29
TN043	0.00	C	2.70	5.02	Loam	0.30

Table 4-47. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102070601. The definition of "Hydrologic Group" is provided in Appendix IV.

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County	COUNTY POPULATION			Portion of Watershed (%)	ESTIMATED POPULATION IN WATERSHED			% Change (1990-2000)
	1990	1997	2000		1990	1997	2000	
McNairy	22,422	23,678	24,653	11.63	2,609	2,755	2,868	9.9

Table 4-48. Population Estimates in Subwatershed 080102070601.

Populated Place	County	Population	NUMBER OF HOUSING UNITS			
			Total	Public Sewer	Septic Tank	Other
Bethel Springs	McNairy	765	347	9	334	4
Selmer	McNairy	3,838	1,780	1,593	155	32
Total		4,603	2,127	1,602	489	36

Table 4-49. Housing and Sewage Disposal Practices of Select Communities in Subwatershed 080102070601.

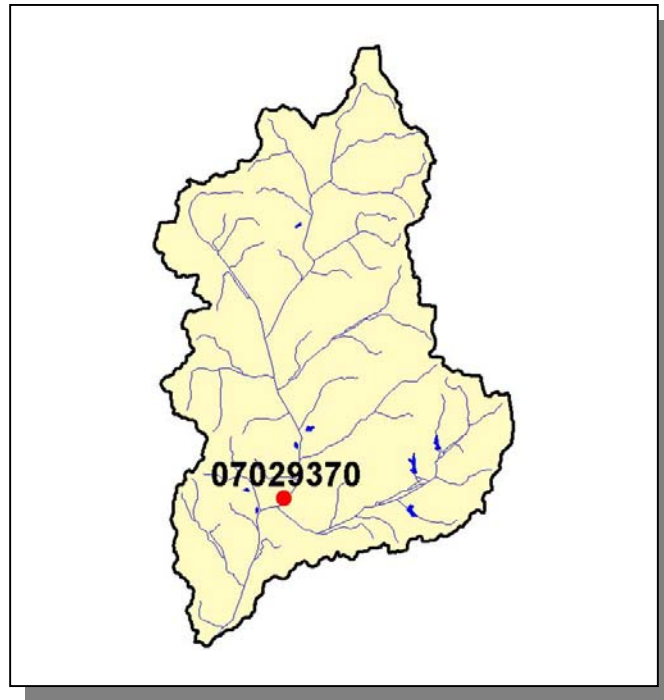


Figure 4-45. Location of Historical Streamflow Data Collection Sites in Subwatershed 080102070601. More information is provided in Appendix IV.

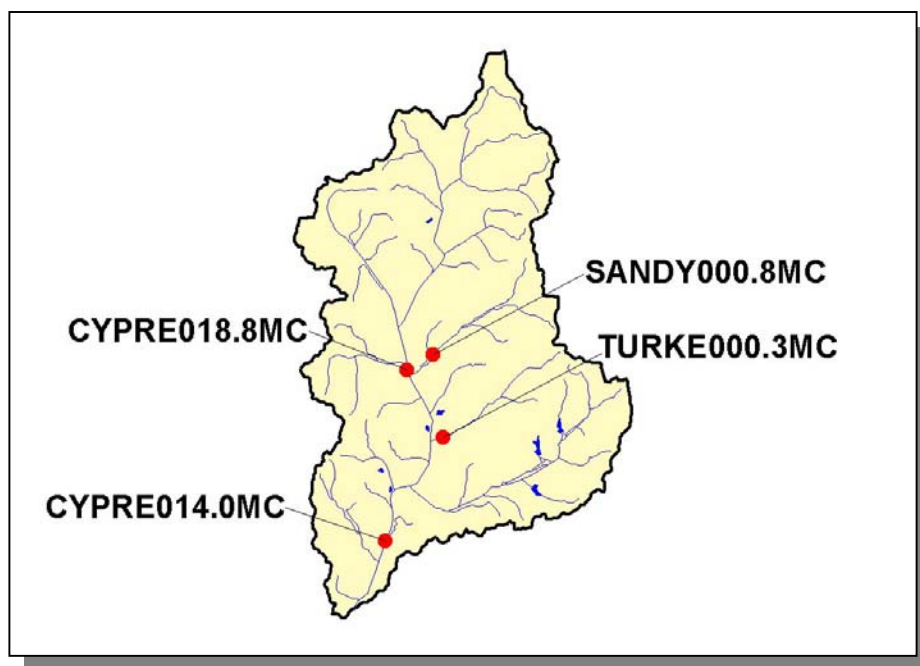


Figure 4-46. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 080102070601. More information, including site names and locations, is provided in Appendix IV.

4.2.D.i.a. Point Source Contributions.

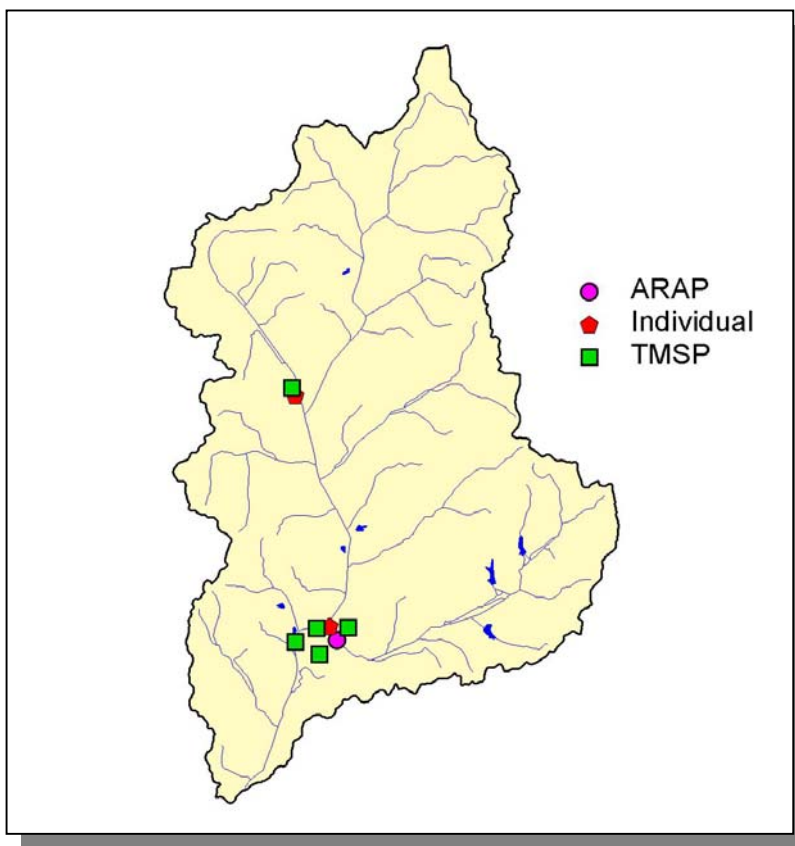


Figure 4-47. Location of Permits Issued in Subwatershed 080102070601. More information, including the names of facilities, is provided in Appendix IV.

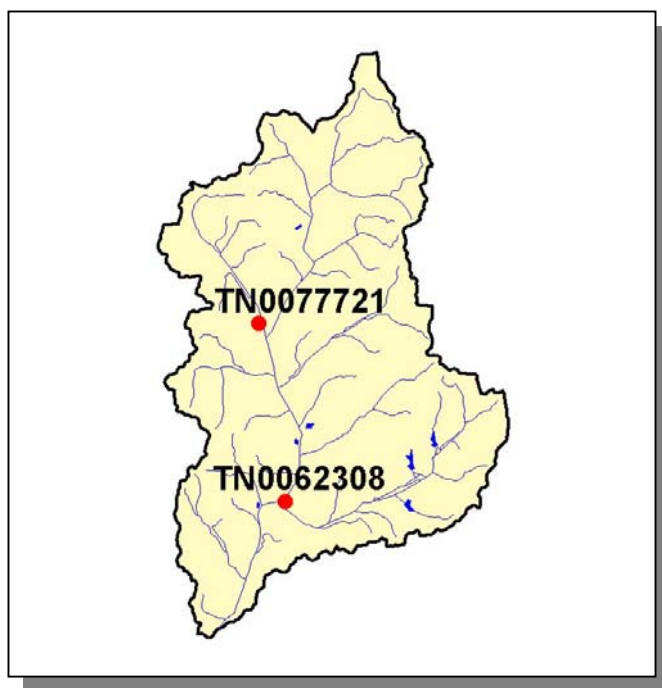


Figure 4-48. Location of Active NPDES Sites in Subwatershed 080102070601. More information, including the names of facilities, is provided in Appendix IV.

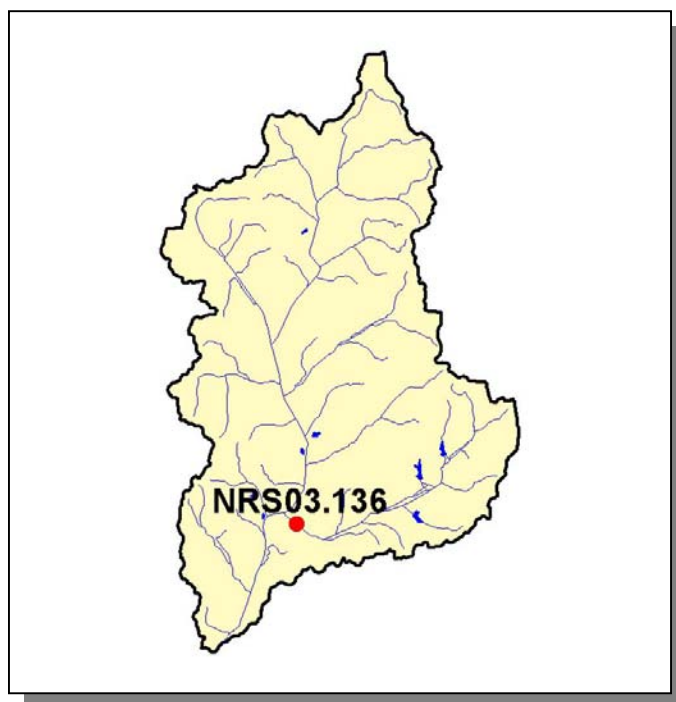


Figure 4-49. Location of Aquatic Resource Alteration Permit (ARAP) Sites (Individual Permits) in Subwatershed 080102070601. More information is provided in Appendix IV.

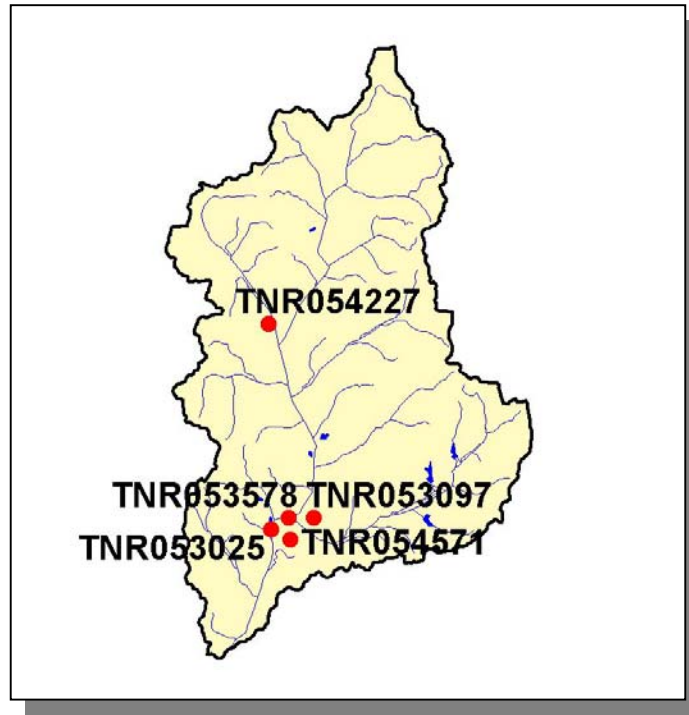


Figure 4-50. Location of TMSP Sites in Subwatershed 080102070601. More information, including the names of facilities, is provided in Appendix IV.

4.2.D.i.b. Nonpoint Source Contributions.

LIVESTOCK COUNTS					
Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
535	981	<5	<5	1,073	9

Table 4-50. Summary of Livestock Count Estimates in Subwatershed 080102070601. According to the 1997 Census of Agriculture (<http://www.nass.usda.gov/census/>), “Cattle” includes heifers, heifer calves, steers, bulls and bull calves; “Chickens” are layers 20 weeks and older.

LIVESTOCK COUNTS						
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
McNairy	5,659	10,365	7	491	11,346	98

Table 4-51. Summary of Livestock Count Estimates in McNairy County. According to the 1997 Census of Agriculture (<http://www.nass.usda.gov/census/>), “Cattle” includes heifers, heifer calves, steers, bulls and bull calves; “Chickens” are layers 20 weeks and older.

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	INVENTORY		REMOVAL RATE	
County	Forest Land (thousand acres)	Timber Land (thousand acres)	Growing Stock (million cubic feet)	Sawtimber (million board feet)
McNairy				

Table 4-52. Forest Acreage and Annual Removal Rates (1987-1994) in McNairy County.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	0.55
Grass (Hayland)	0.06
Legumes, Grass (Hayland)	0.07
Legumes (Hayland)	0.12
Grass, Forbs, Legumes (Mixed Pasture)	0.58
Corn (Row Crops)	11.02
Cotton (Row Crops)	5.45
Sorghum (Row Crops)	3.62
Soybeans (Row Crops)	9.77
Wheat (Close-Grown Cropland)	1.92
Other Cropland not Planted	2.27
Conservation Reserve Program Lands	0.28
Farmsteads and Ranch Headquarters	0.11

Table 4-53. Annual Estimated Total Soil Loss in Subwatershed 080102070601.

4.2.D.ii. 080102070602 (Muddy Creek).

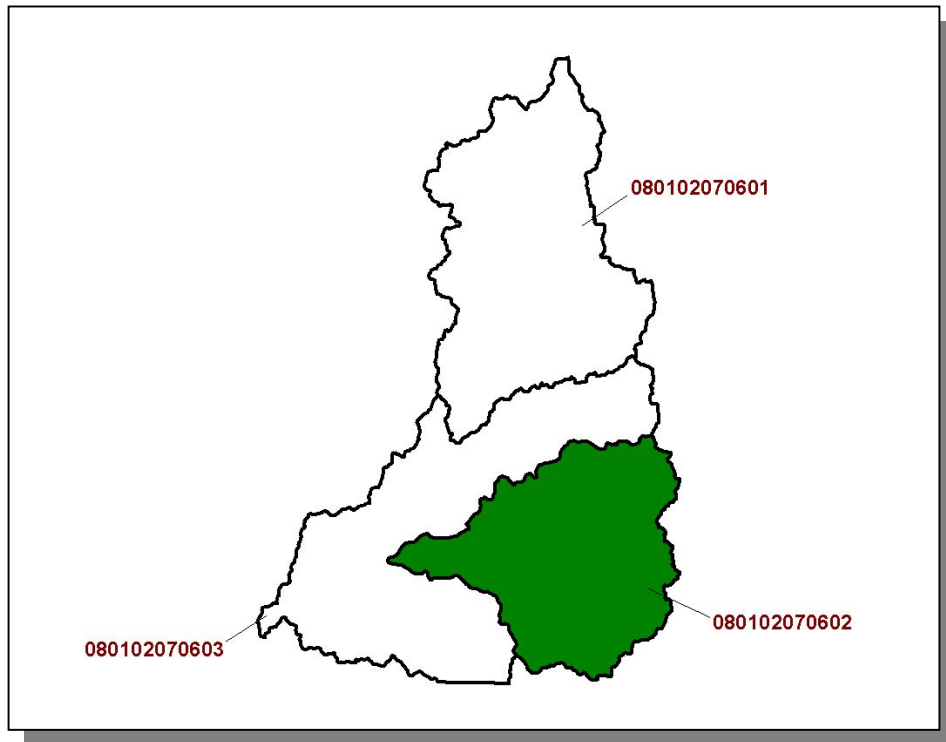


Figure 4-51. Location of Subwatershed 080102070602. All HUC-12 subwatershed boundaries are shown for reference.

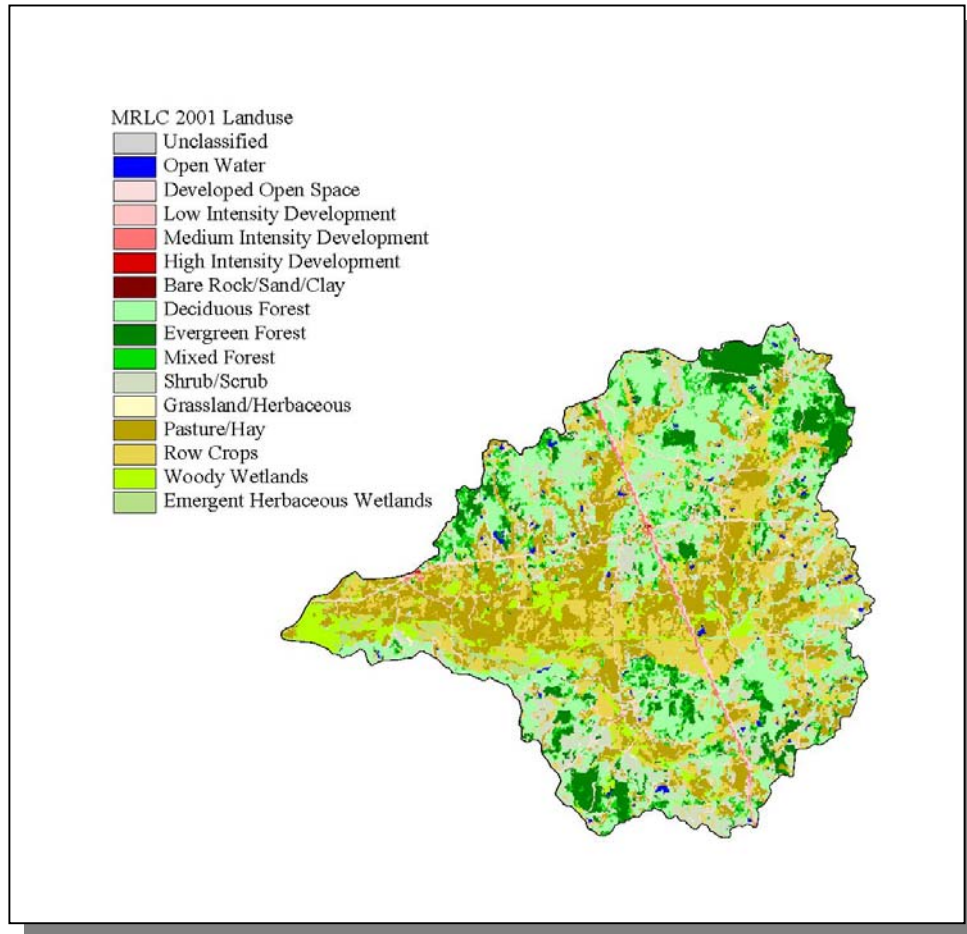


Figure 4-52. Illustration of Land Use Distribution in Subwatershed 080102070602.

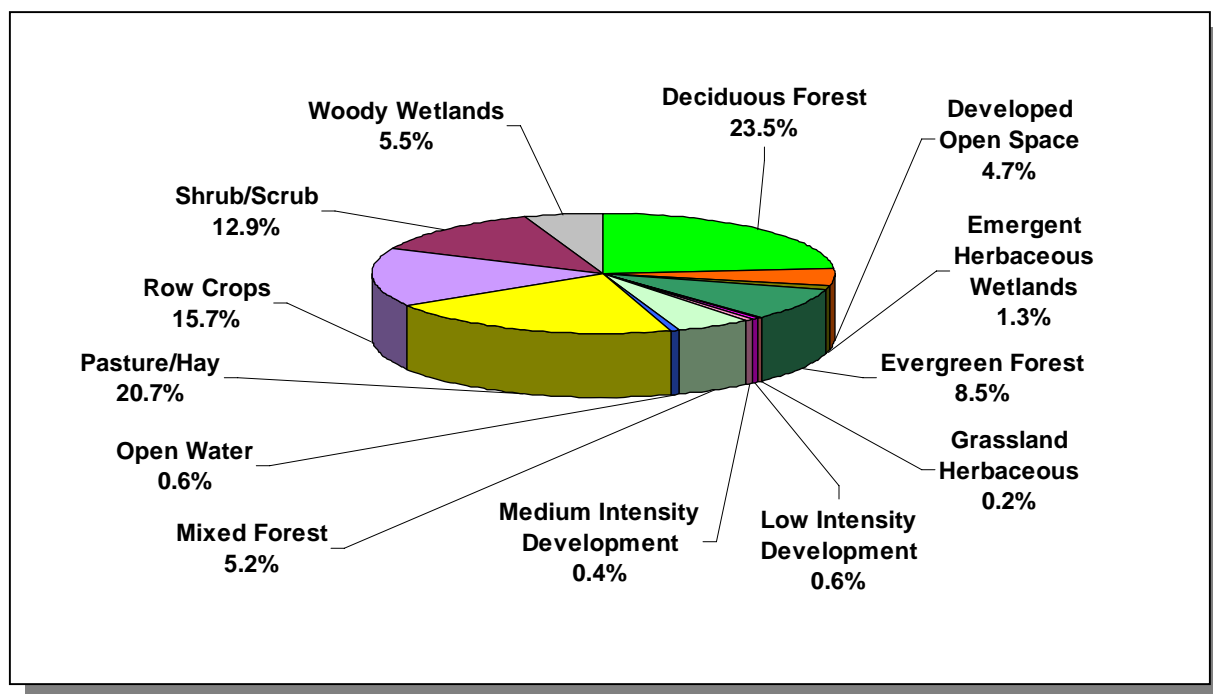


Figure 4-53. Land Use Distribution in Subwatershed 080102070602. More information is provided in Appendix IV.

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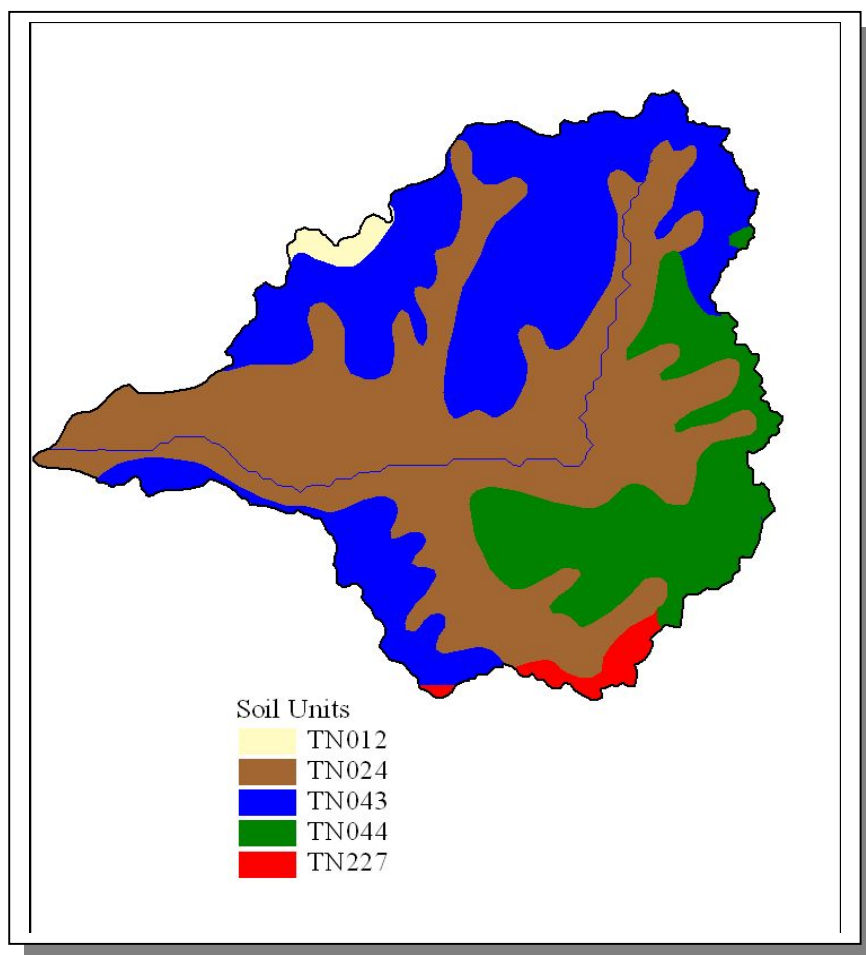


Figure 4-54. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102070602.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN012	1.00	C	2.52	5.13	Silty Loam	0.39
TN024	61.00	D	2.18	5.35	Loam	0.29
TN043	0.00	C	2.70	5.02	Loam	0.30
TN044	0.00	C	1.48	5.32	Silty Loam	0.42
TN227	0.00	C	2.41	5.03	Silty Loam	0.38

Table 4-54. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102070602. The definition of "Hydrologic Group" is provided in Appendix IV..

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County	COUNTY POPULATION			Portion of Watershed (%)	ESTIMATED POPULATION IN WATERSHED			% Change (1990-2000)
	1990	1997	2000		1990	1997	2000	
McNairy	22,422	23,678	24,653	9.13	2,047	2,162	2,251	10.0

Table 4-55. Population Estimates in Subwatershed 080102070602.

Populated Place	County	Population	NUMBER OF HOUSING UNITS			
			Total	Public Sewer	Septic Tank	Other
Eastview	McNairy	561	264	7	255	2
Ramer	McNairy	344	145	9	130	6
Total		905	409	16	385	8

Table 4-56. Housing and Sewage Disposal Practices of Select Communities in Subwatershed 080102070602.

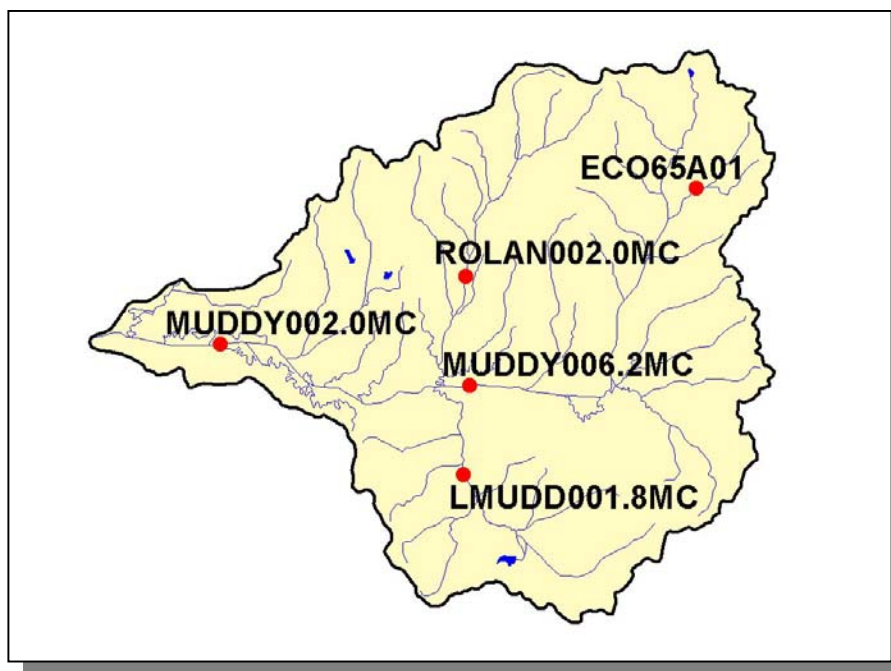


Figure 4-55. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 080102070602. More information, including site names and locations, is provided in Appendix IV.

4.2.D.ii.a. Point Source Contributions.

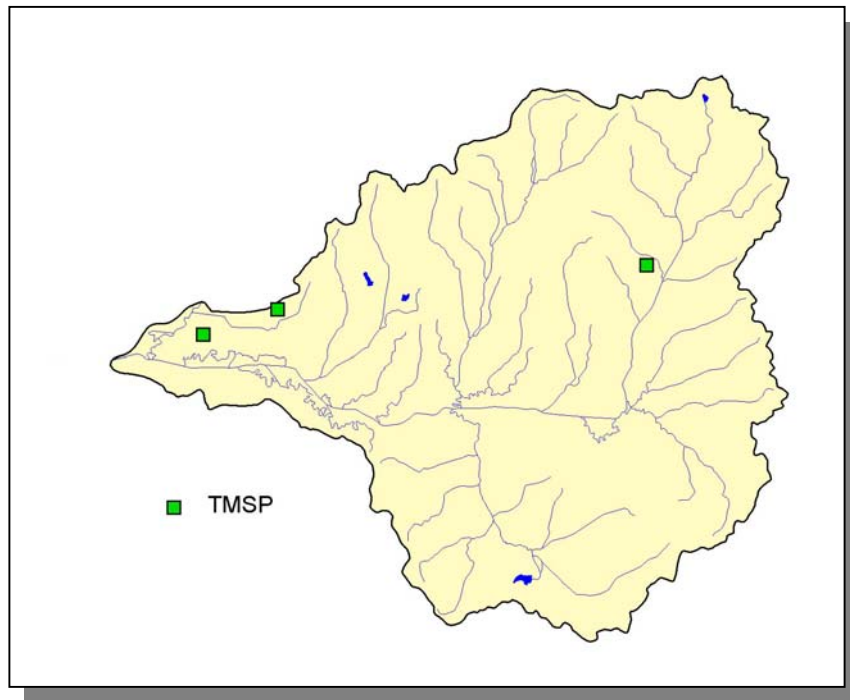


Figure 4-56. Location of Permits Issued in Subwatershed 080102070602. More information, including the names of facilities, is provided in Appendix IV.



Figure 4-57. Location of TMSF Sites in Subwatershed 080102070602. More information, including the names of facilities, is provided in Appendix IV.

4.2.D.ii.b. Nonpoint Source Contributions.

LIVESTOCK COUNTS					
Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
884	1,620	<5	<5	1,770	15

Table 4-57. Summary of Livestock Count Estimates in Subwatershed 080102070602. According to the 1997 Census of Agriculture (<http://www.nass.usda.gov/census/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

LIVESTOCK COUNTS						
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
McNairy	5,659	10,365	7	491	11,346	98

Table 4-58. Summary of Livestock Count Estimates in McNairy County. According to the 1997 Census of Agriculture (<http://www.nass.usda.gov/census/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

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	INVENTORY		REMOVAL RATE	
County	Forest Land (thousand acres)	Timber Land (thousand acres)	Growing Stock (million cubic feet)	Sawtimber (million board feet)
McNairy				

Table 4-59. Forest Acreage and Annual Removal Rates (1987-1994) in McNairy County.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	0.55
Grass (Hayland)	0.07
Legumes, Grass (Hayland)	0.07
Legumes (Hayland)	0.07
Grass, Forbs, Legumes (Mixed Pasture)	0.59
Corn (Row Crops)	10.99
Cotton (Row Crops)	5.54
Sorghum (Row Crops)	3.62
Soybeans (Row Crops)	9.74
Wheat (Close-Grown Cropland)	1.92
Other Cropland not Planted	2.27
Conservation Reserve Program Lands	0.28
Farmsteads and Ranch Headquarters	0.10

Table 4-60. Annual Estimated Total Soil Loss in Subwatershed 080102070602.

4.2.D.iii. 080102070603 (Lower Cypress Creek).

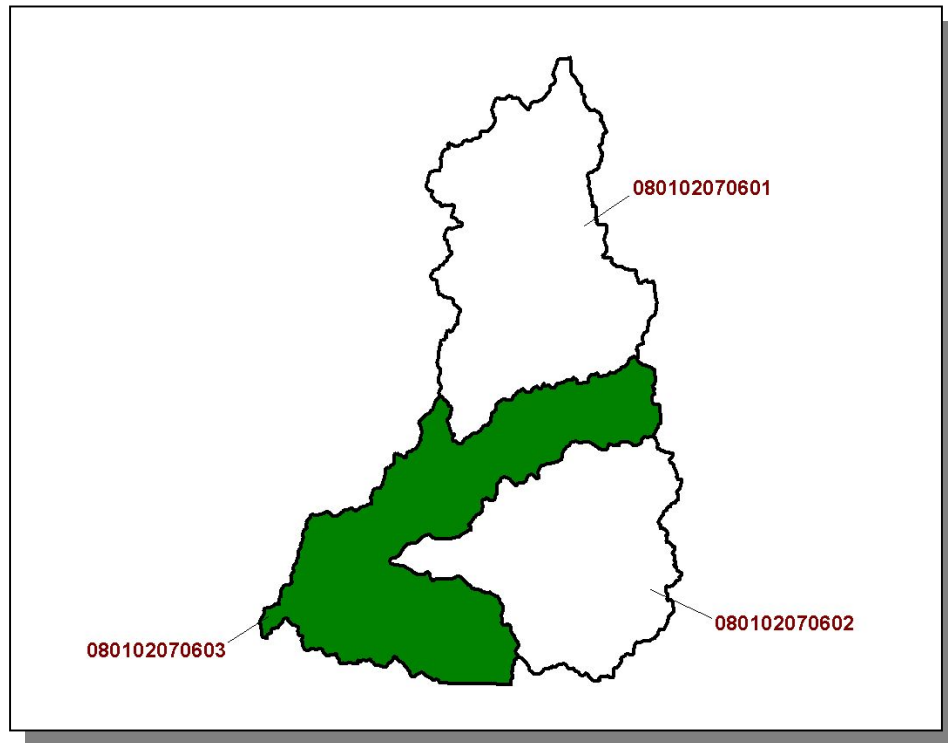


Figure 4-58. Location of Subwatershed 080102070603. All HUC-12 subwatershed boundaries are shown for reference.

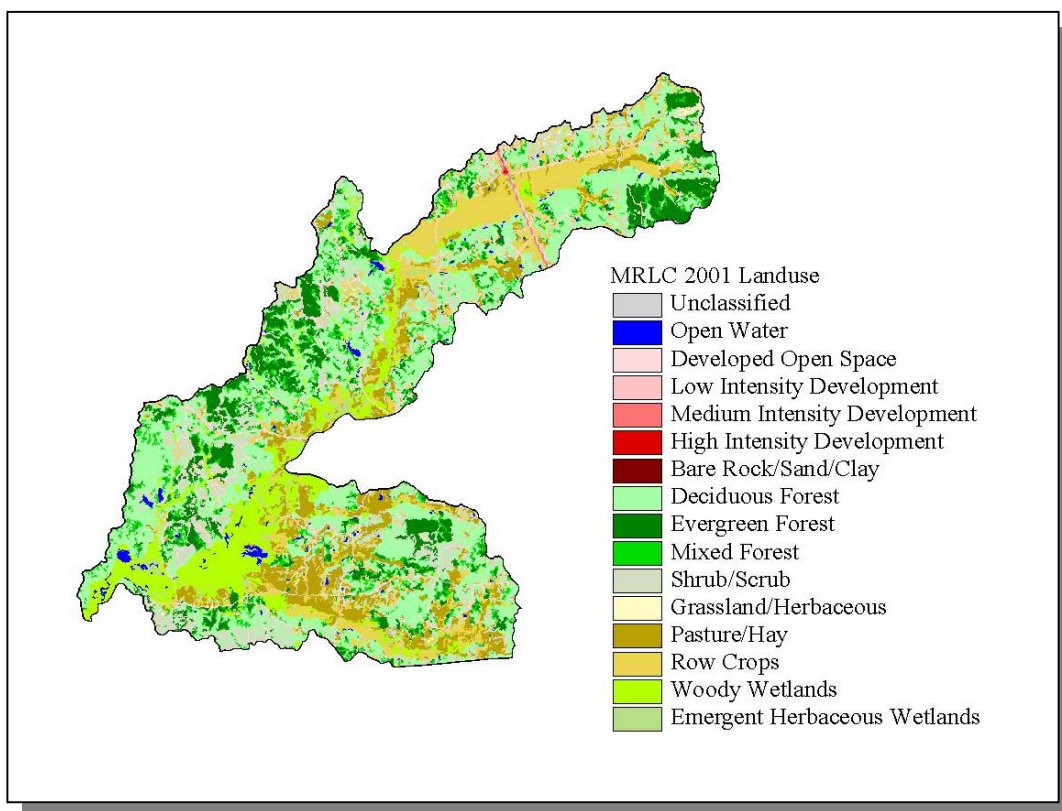


Figure 4-59. Illustration of Land Use Distribution in Subwatershed 080102070603.

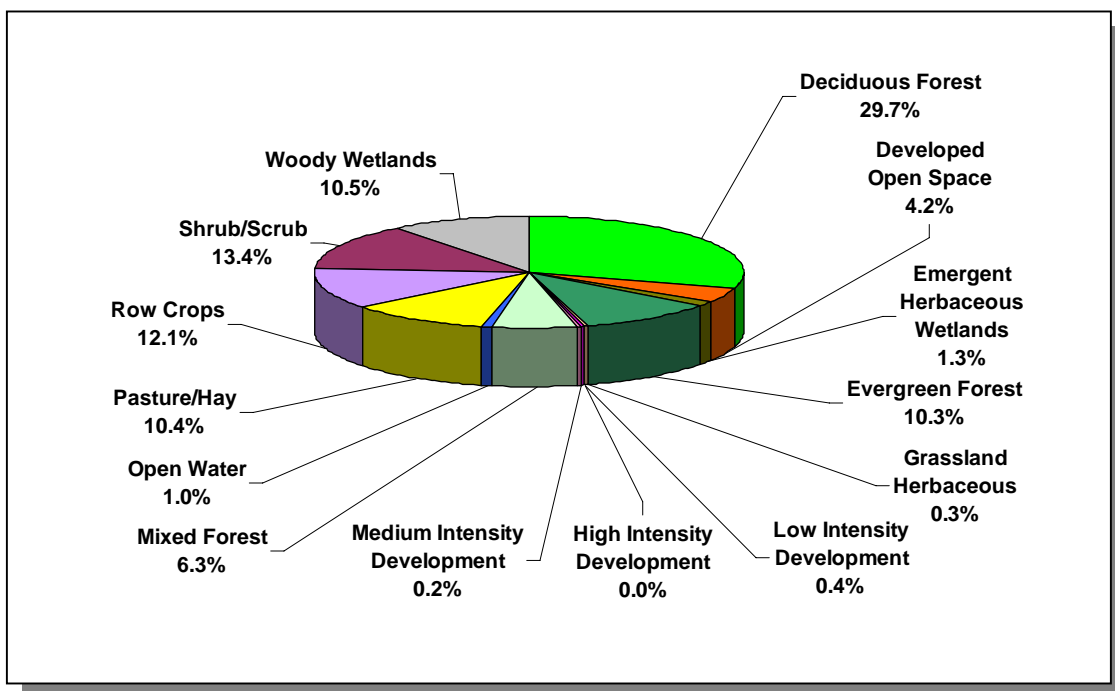


Figure 4-60. Land Use Distribution in Subwatershed 080102070603. More information is provided in Appendix IV.

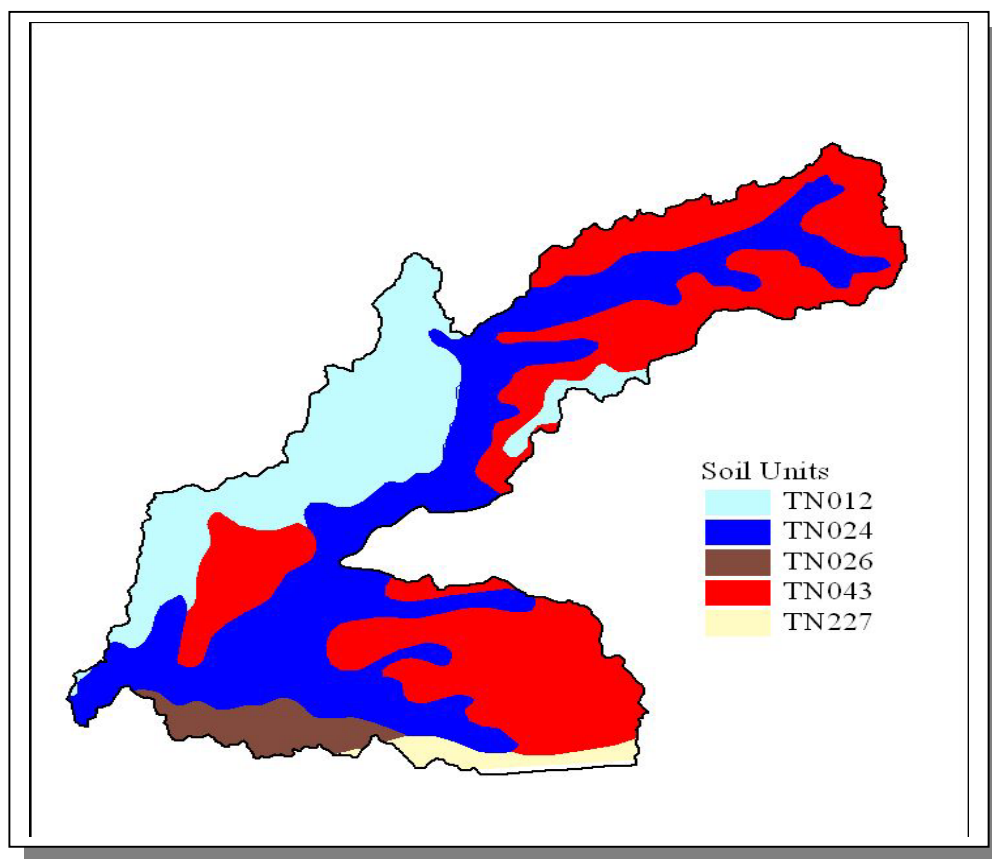


Figure 4-61. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102070603.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN012	1.00	C	2.52	5.13	Silty Loam	0.39
TN024	61.00	D	2.18	5.35	Loam	0.29
TN026	0.00	B	1.52	5.13	Silty Loam	0.40
TN043	0.00	C	2.70	5.02	Loam	0.30
TN227	0.00	C	2.41	5.03	Silty Loam	0.38

Table 4-61. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102070603. The definition of "Hydrologic Group" is provided in Appendix IV.

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County	COUNTY POPULATION			Portion of Watershed (%)	ESTIMATED POPULATION IN WATERSHED			% Change (1990-2000)
	1990	1997	2000		1990	1997	2000	
McNairy	22,422	23,678	25,653	11.05	2,477	2,615	2,723	9.9

Table 4-62. Population Estimates in Subwatershed 080102070603.

Populated Place	County	Population	NUMBER OF HOUSING UNITS			
			Total	Public Sewer	Septic Tank	Other
Eastview	McNairy	561	264	7	255	2
Ramer	McNairy	344	145	9	130	6
Selmer	McNairy	3,838	1,780	1,593	155	32
Total		4,743	4,446	1,609	540	40

Table 4-63. Housing and Sewage Disposal Practices of Select Communities in Subwatershed 080102070603.

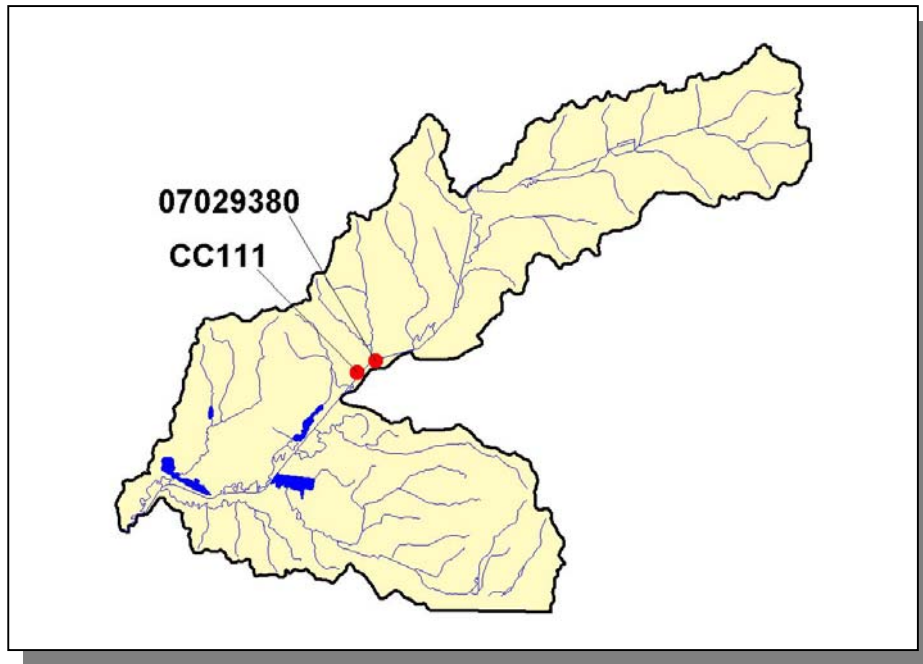


Figure 4-62. Location of Historical Streamflow Data Collection Sites in Subwatershed 080102070603. More information is provided in Appendix IV.

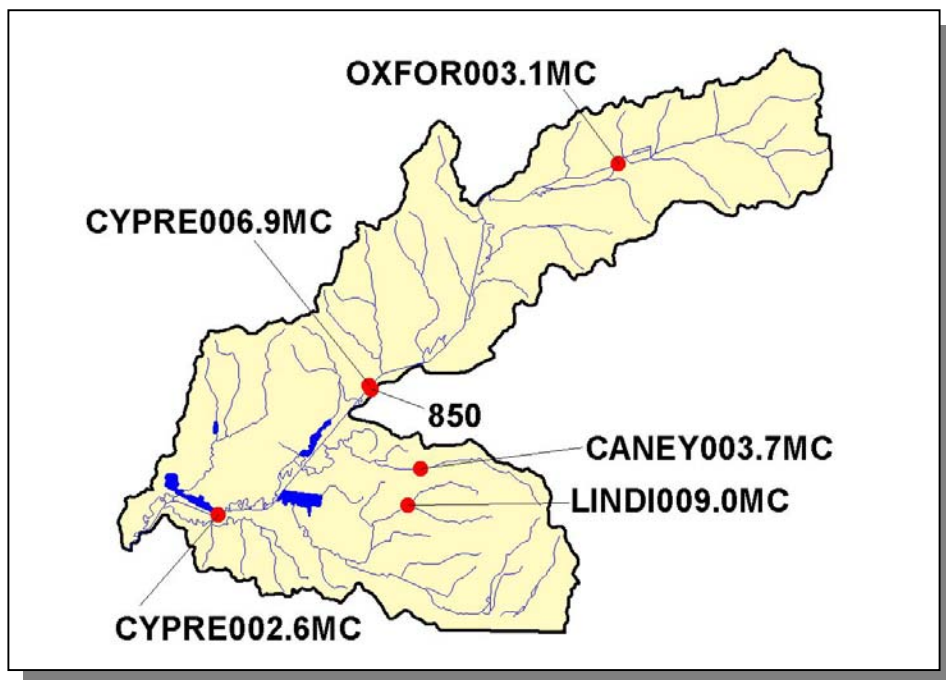


Figure 4-63. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 080102070603. More information, including site names and locations, is provided in Appendix IV.

4.2.D.iii.a. Point Source Contributions.

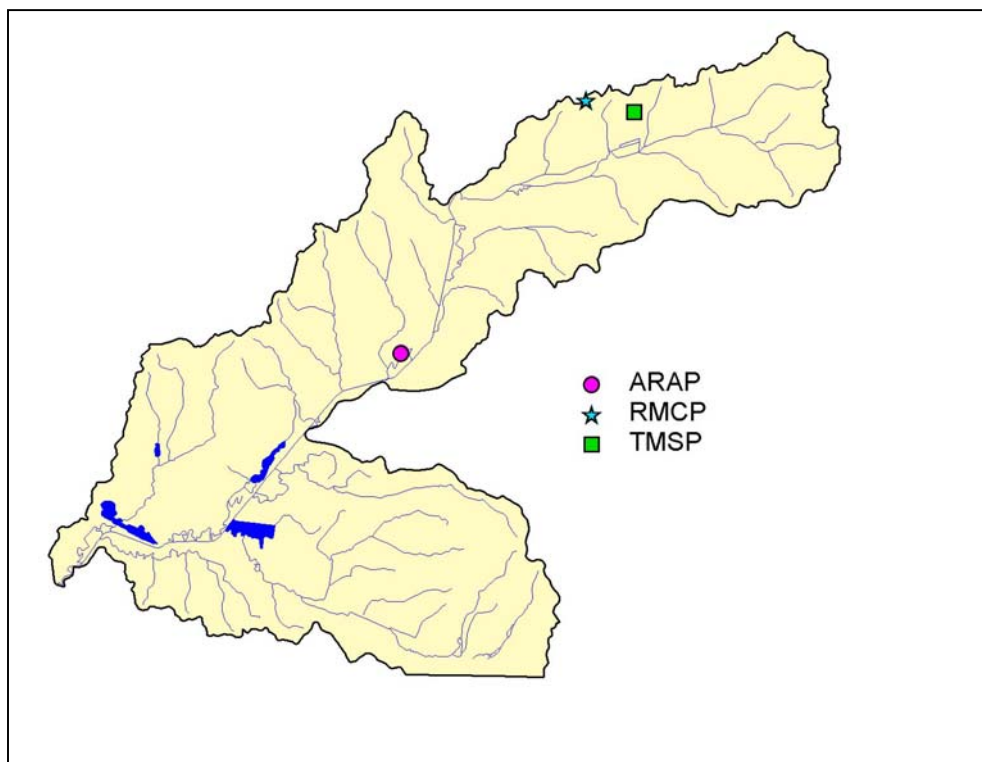


Figure 4-64. Location of Permits Issued in Subwatershed 080102070603. More information, including the names of facilities, is provided in Appendix IV.

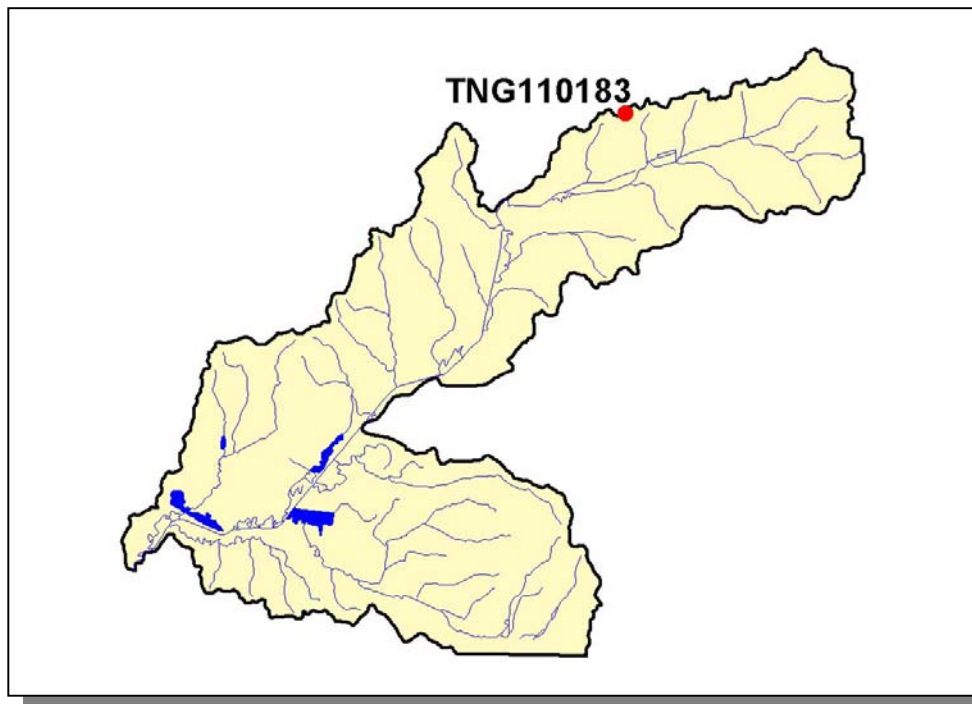


Figure 4-65. Location of Ready Mix Concrete Plants (RMCP) in Subwatershed 080102070603. More information is provided in Appendix IV.

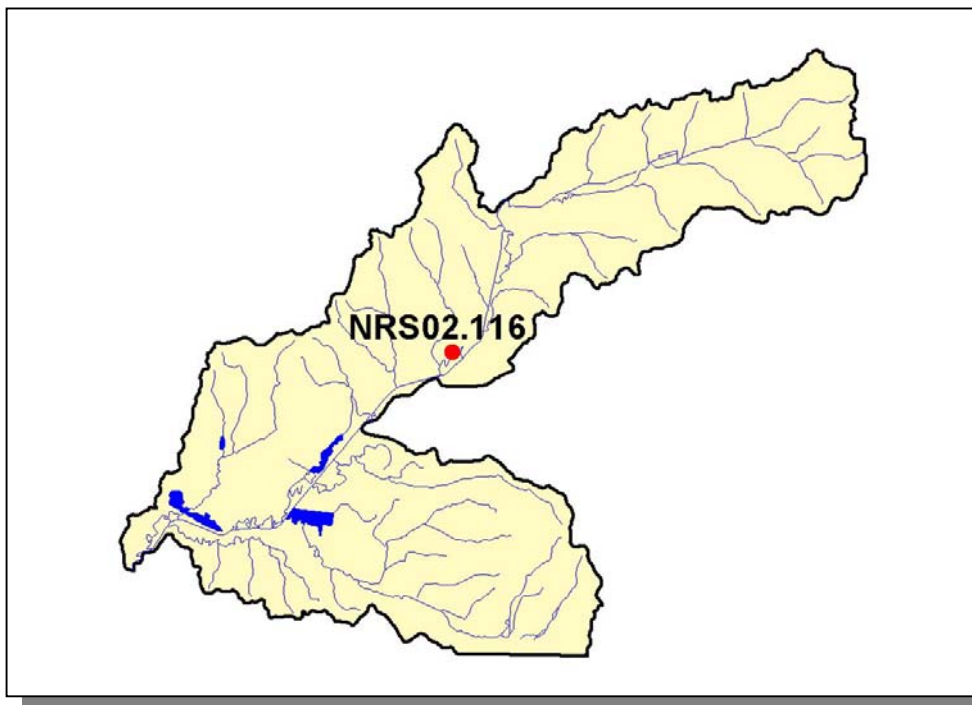


Figure 4-66. Location of Aquatic Resource Alteration Permit (ARAP) Sites (Individual Permits) in Subwatershed 080102070603. More information is provided in Appendix IV.

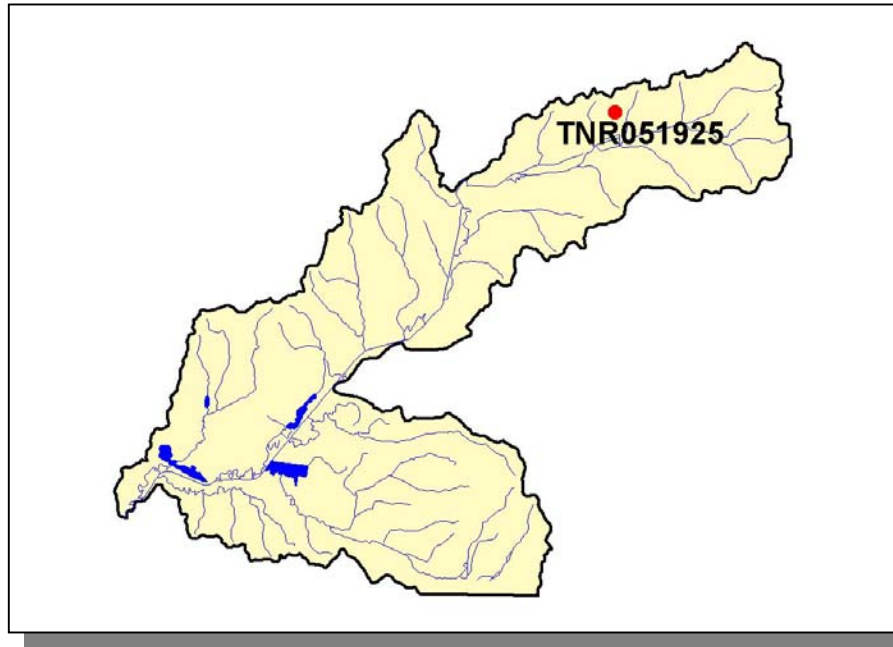


Figure 4-67. Location of TMSF Sites in Subwatershed 080102070603. More information, including the names of facilities, is provided in Appendix IV.

4.2.D.iii.b. Nonpoint Source Contributions.

LIVESTOCK COUNTS					
Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
626	1,154	<5	<5	1,181	10

Table 4-64. Summary of Livestock Count Estimates in Subwatershed 080102080603. According to the 1997 Census of Agriculture (<http://www.nass.usda.gov/census/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

LIVESTOCK COUNTS						
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
McNairy	5,659	10,365	7	491	11,346	98

Table 4-65. Summary of Livestock Count Estimates in McNairy County. According to the 1997 Census of Agriculture (<http://www.nass.usda.gov/census/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

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	INVENTORY		REMOVAL RATE	
County	Forest Land (thousand acres)	Timber Land (thousand acres)	Growing Stock (million cubic feet)	Sawtimber (million board feet)
McNairy				

Table 4-66. Forest Acreage and Annual Removal Rates (1987-1994) in McNairy County.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	0.55
Grass (Hayland)	0.10
Legumes, Grass (Hayland)	0.07
Legumes (Hayland)	0.12
Grass, Forbs, Legumes (Mixed Pasture)	0.60
Corn (Row Crops)	10.91
Cotton (Row Crops)	5.77
Sorghum (Row Crops)	3.62
Soybeans (Row Crops)	9.68
Wheat (Close-Grown Cropland)	1.92
Other Cropland not Planted	2.26
Conservation Reserve Program Lands	0.28
Farmsteads and Ranch Headquarters	0.10

Table 4-67. Annual Estimated Total Soil Loss in Subwatershed 080102070603.

4.2.E. 0801020707.

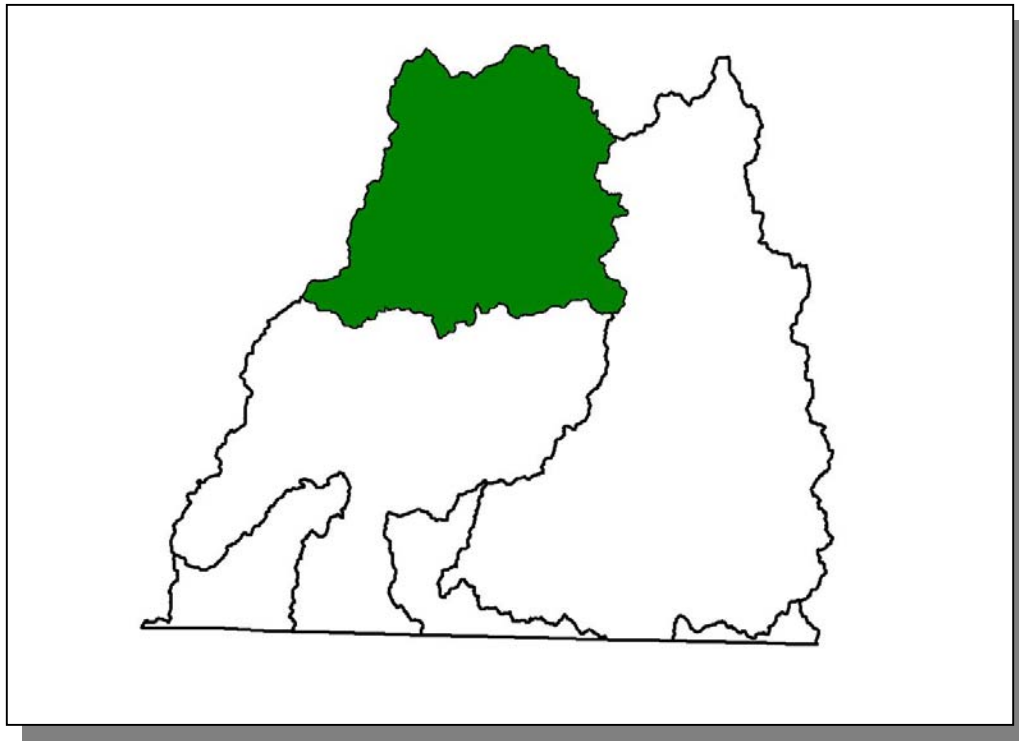


Figure 4-68. Location of Subwatershed 0801020707. All Little Hatchie River HUC-10 subwatershed boundaries in Tennessee are shown for reference.

4.2.E.i. 080102070701 (Upper Little Hatchie Creek).

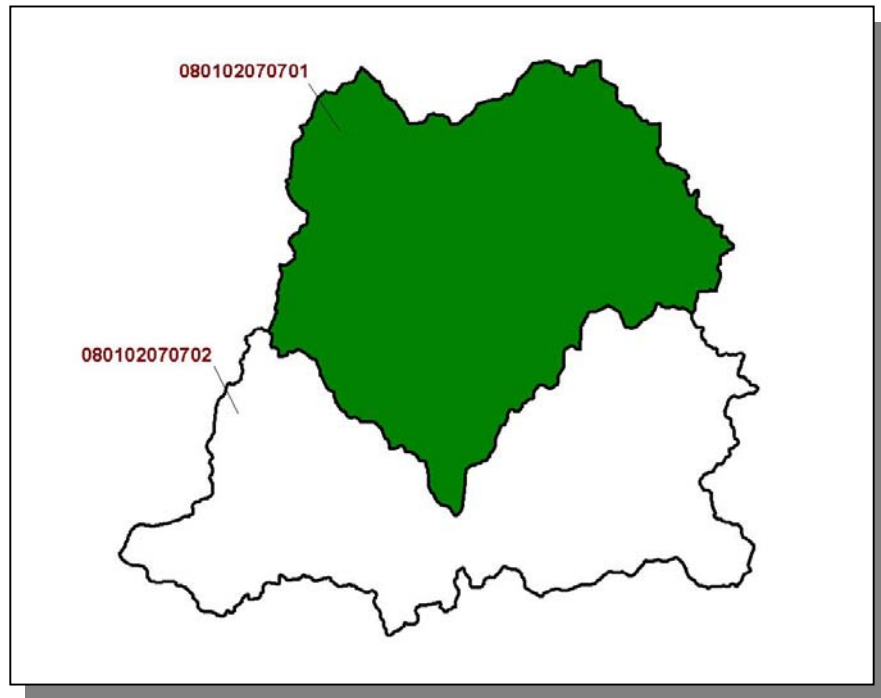


Figure 4-69. Location of Subwatershed 080102070701. All HUC-12 subwatershed boundaries in Tennessee are shown for reference.

MRLC 2001 Landuse

- Unclassified
- Open Water
- Developed Open Space
- Low Intensity Development
- Medium Intensity Development
- High Intensity Development
- Bare Rock/Sand/Clay
- Deciduous Forest
- Evergreen Forest
- Mixed Forest
- Shrub/Scrub
- Grassland/Herbaceous
- Pasture/Hay
- Row Crops
- Woody Wetlands
- Emergent Herbaceous Wetlands

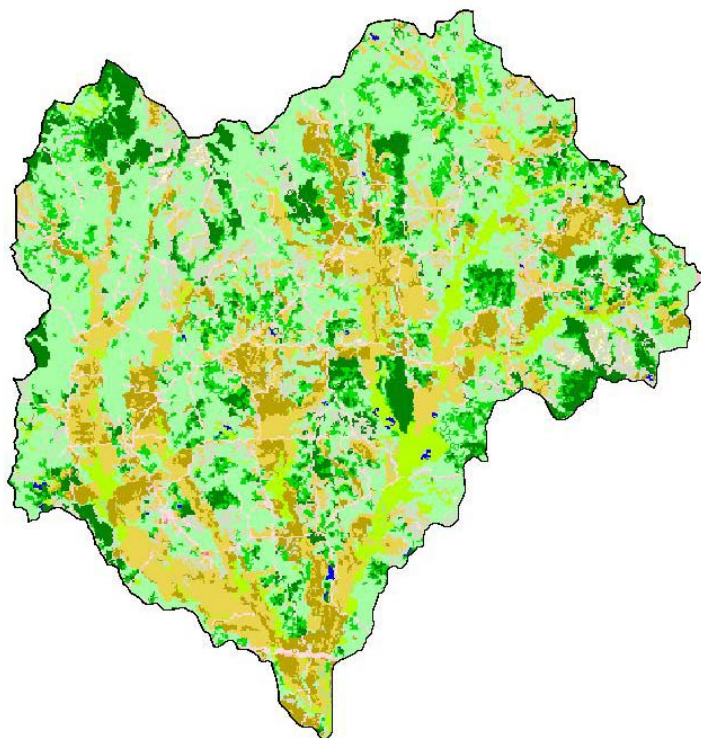


Figure 4-70. Illustration of Land Use Distribution in Subwatershed 080102070701.

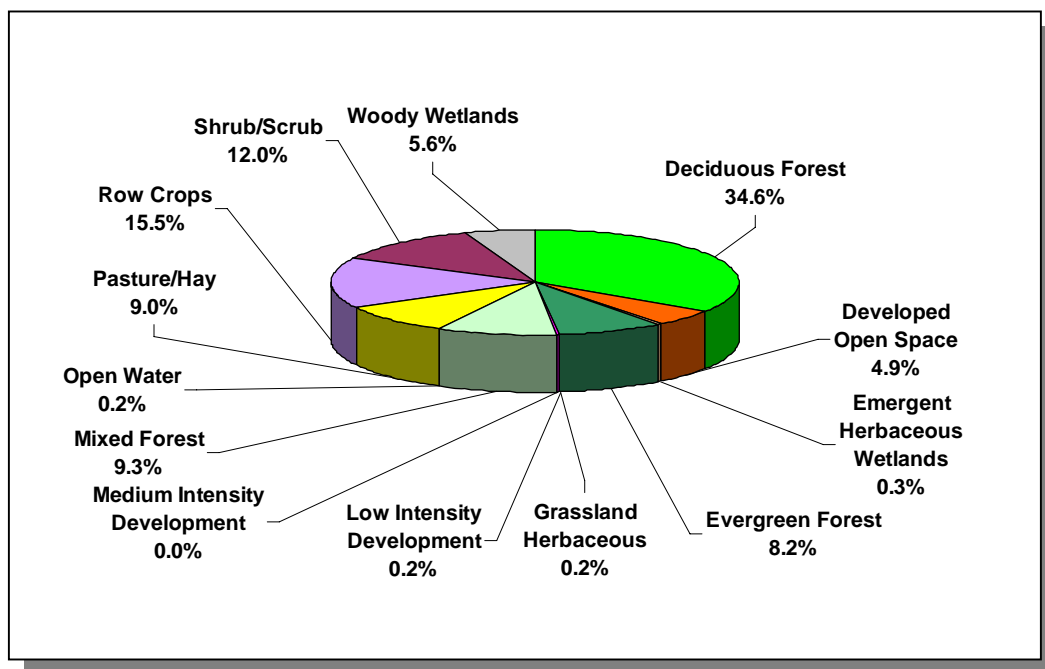


Figure 4-71. Land Use Distribution in Subwatershed 080102070701. More information is provided in Appendix IV.

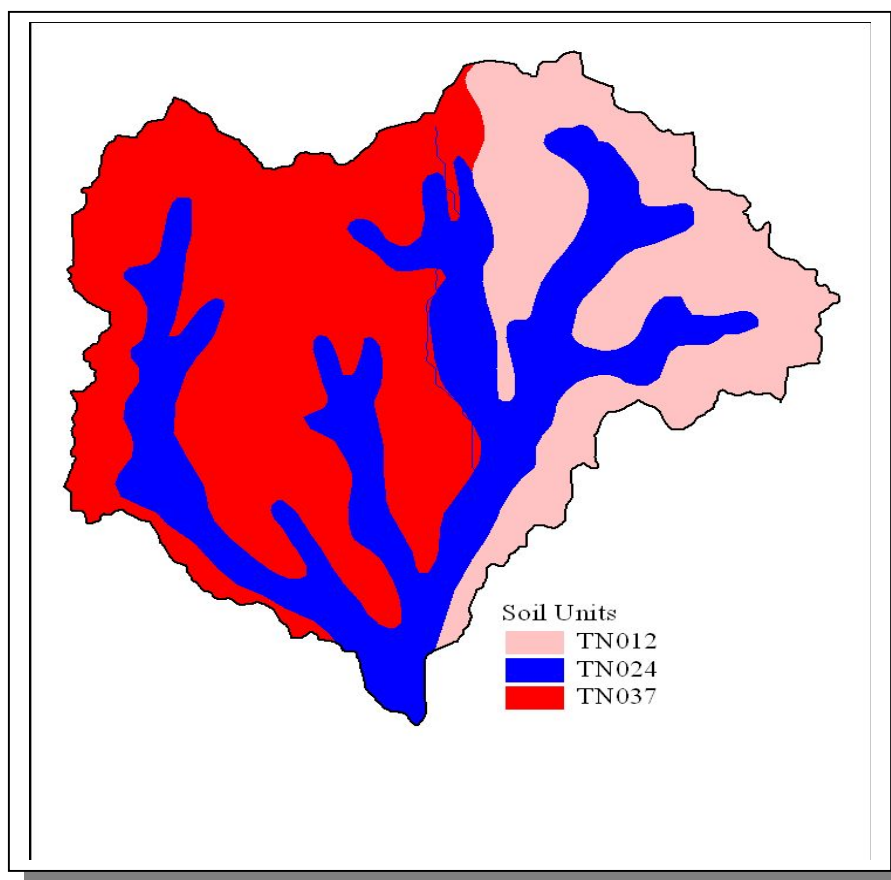


Figure 4-72. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102070701.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN012	1.00	C	2.52	5.13	Silty Loam	0.39
TN024	61.00	D	2.18	5.35	Loam	0.29
TN037	0.00	C	3.51	4.86	Sandy Loam	0.27

Table 4-68. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102070701. The definition of "Hydrologic Group" is provided in Appendix IV.

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County	COUNTY POPULATION			Portion of Watershed (%)	ESTIMATED POPULATION IN WATERSHED			% Change (1990-2000)
	1990	1997	2000		1990	1997	2000	
Chester	12,819	14,469	15,540	6.46	828	934	1,003	21.1
Hardeman	23,377	24,702	28,105	0.03	8	8	9	12.5
McNairy	22,422	23,678	24,653	4.8	1,076	1,137	1,183	9.9
Total	58,618	62,849	68,298		1,912	2,079	2,195	14.8

Table 4-69. Population Estimates in Subwatershed 080102070701.

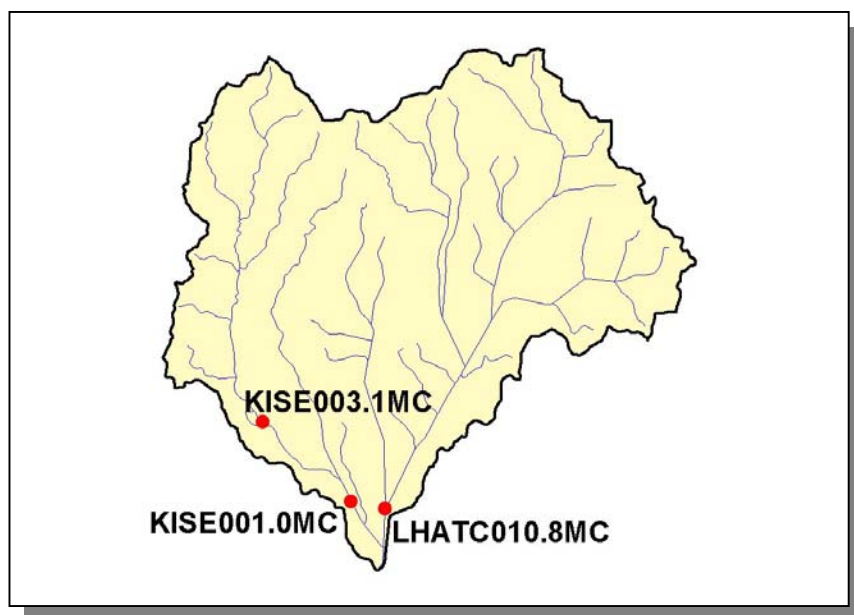


Figure 4-73. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 080102070701. More information, including site names and locations, is provided in Appendix IV.

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4.2.E.i.a. Point Source Contributions.

There are no point source contributions in this subwatershed.

4.2.E.i.b. Nonpoint Source Contributions.

LIVESTOCK COUNTS				
Beef Cow	Cattle	Chickens (Layers)	Hogs	Sheep
221	2,671	<5	774	4

Table 4-70. Summary of Livestock Count Estimates in Subwatershed 080102070701. According to the 1997 Census of Agriculture (<http://www.nass.usda.gov/census/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

LIVESTOCK COUNTS						
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
Chester	0	9,108	0	14	1,334	0
Hardeman	9,184	15,877	62	28	5,221	144
McNairy	5,659	10,365	7	491	11,346	98

Table 4-71. Summary of Livestock Count Estimates in Chester, Hardeman, and McNairy Counties. According to the 1997 Census of Agriculture (<http://www.nass.usda.gov/census/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

County	INVENTORY		REMOVAL RATE	
	Forest Land (thousand acres)	Timber Land (thousand acres)	Growing Stock (million cubic feet)	Sawtimber (million board feet)
Chester	99.4	99.4	0.3	1.3
Hardeman	247.1	247.1	5.0	18.6
McNairy				

Table 4-72. Forest Acreage and Annual Removal Rates (1987-1994) in Chester, Hardeman, and McNairy Counties.

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CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	0.47
Grass (Hayland)	0.16
Legumes, Grass (Hayland)	0.12
Legumes (Haylandd)	0.12
Grass, Forbs, Legumes (Mixed Pasture)	0.51
Corn (Row Crops)	10.61
Cotton (Row Crops)	11.33
Sorghum (Row Crops)	3.61
Soybeans (Row Crops)	8.29
Wheat (Close-Grown Cropland)	5.51
Other Vegetable and Truck Crops	28.15
Summer Fallow (Other Cropland)	6.11
Other Cropland not Planted	1.43
Conservation Reserve Program Lands	0.35
Farmsteads and Ranch Headquarters	0.10

Table 4-73. Annual Estimated Total Soil Loss in Subwatershed 080102070701.

4.2.E.ii. 080102070702 (Lower Little Hatchie Creek).

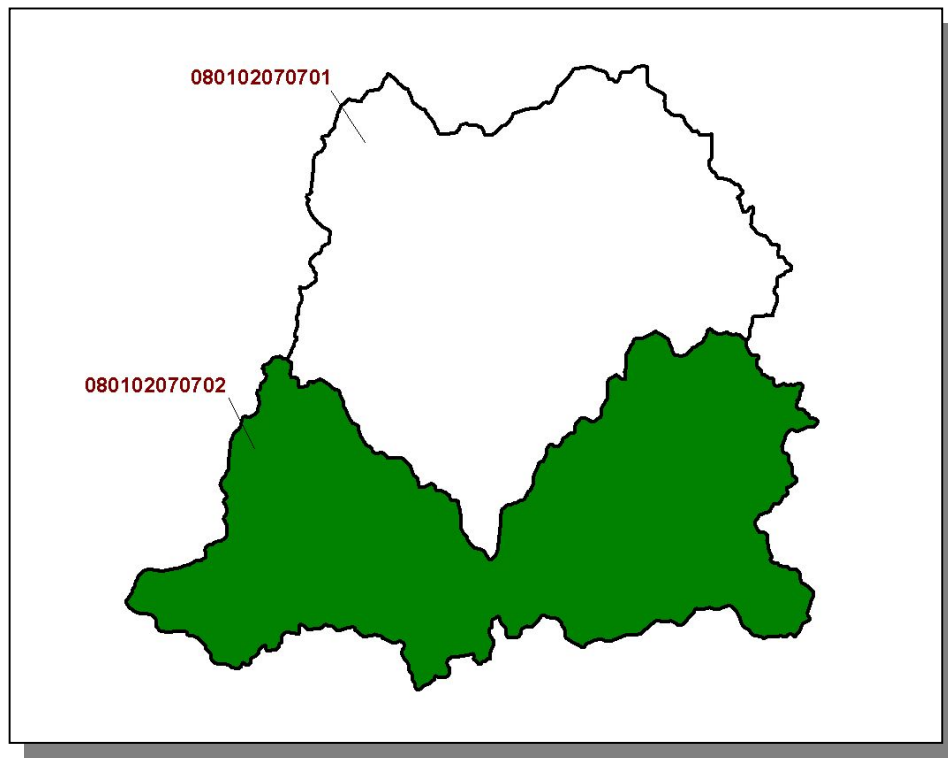


Figure 4-74. Location of Subwatershed 080102070702. All Little Hatchie HUC-12 subwatershed boundaries in Tennessee are shown for reference.

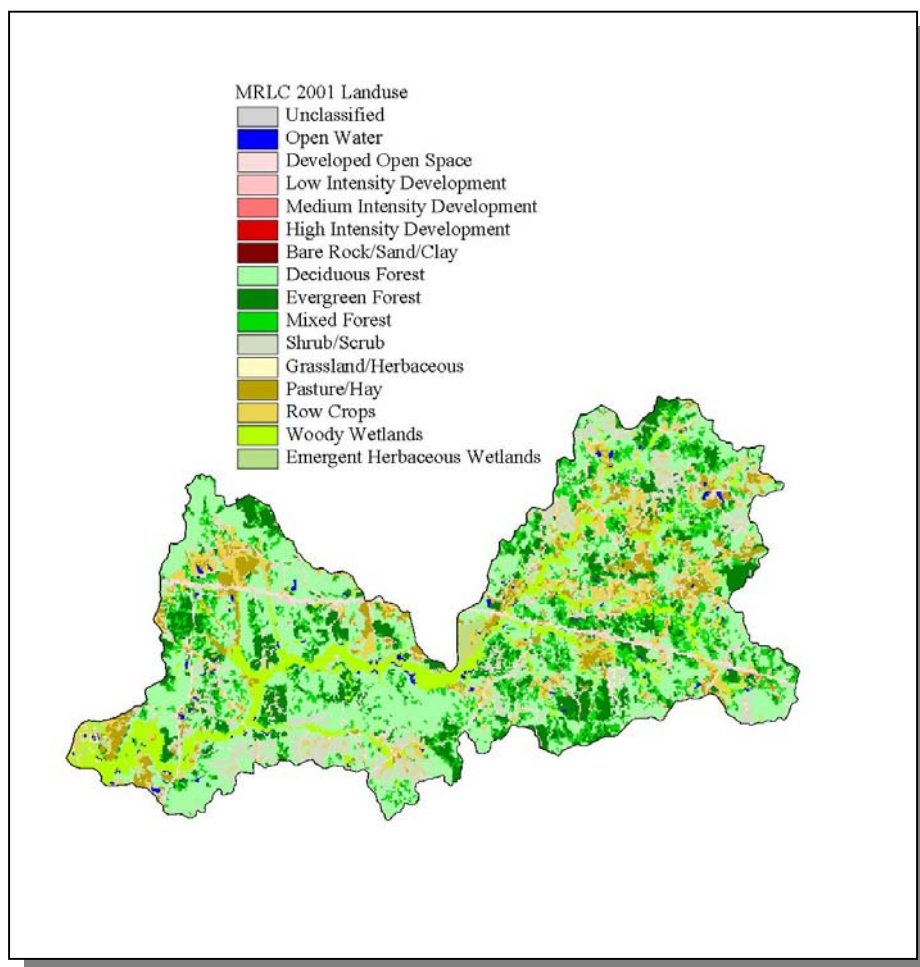


Figure 4-75. Illustration of Land Use Distribution in Subwatershed 080102070702.

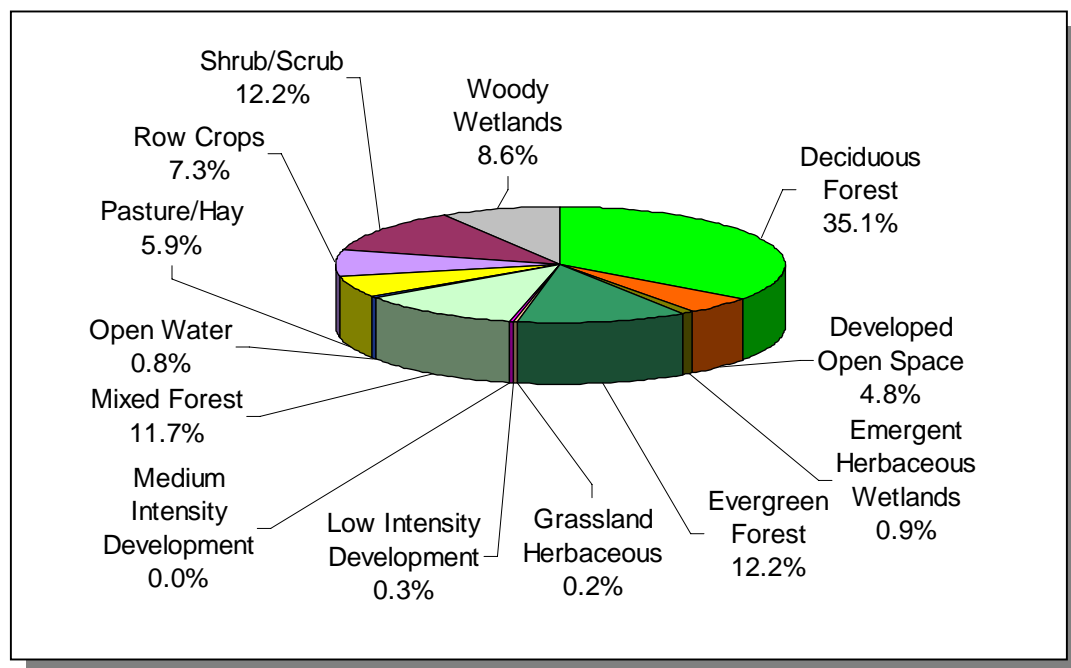


Figure 4-76. Land Use Distribution in Subwatershed 080102070202. More information is provided in Appendix IV.

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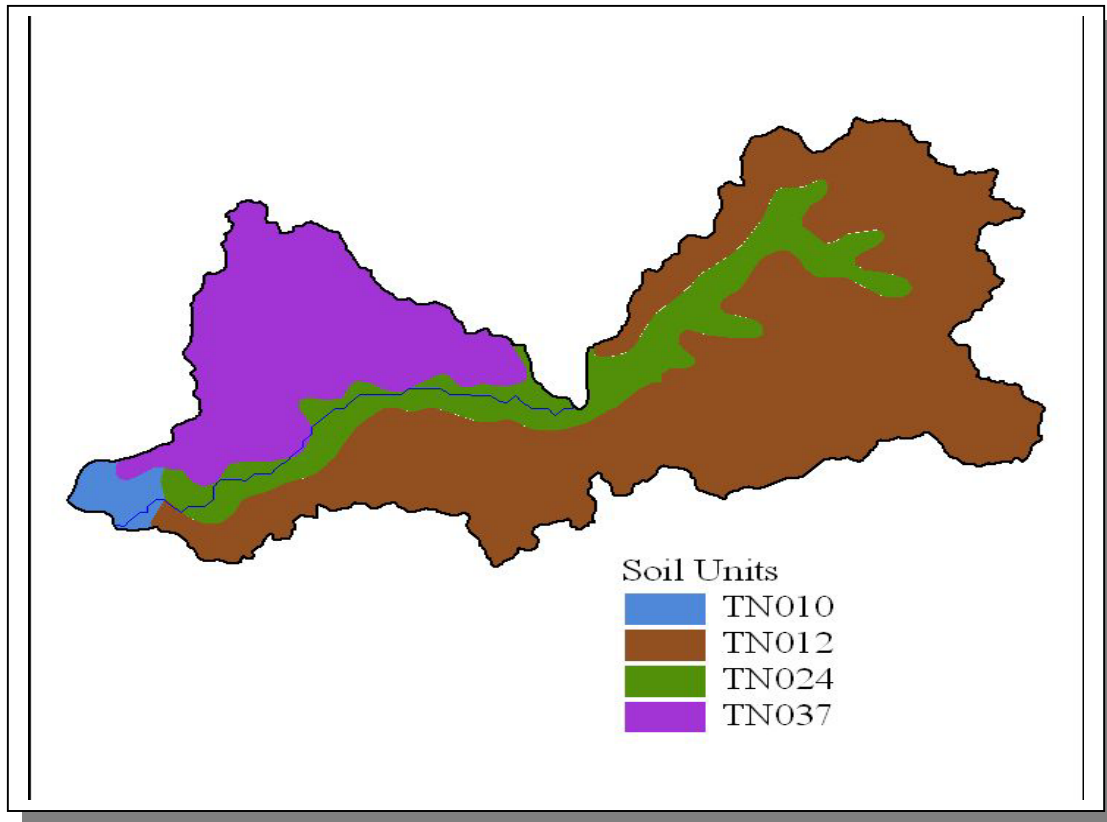


Figure 4-77. STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102070702.

STATSGO MAP UNIT ID	PERCENT HYDRIC	HYDROLOGIC GROUP	PERMEABILITY (in/hour)	SOIL pH	ESTIMATED SOIL TEXTURE	SOIL ERODIBILITY
TN010	81.00	C	1.33	5.11	Silty Loam	0.44
TN012	1.00	C	2.52	5.13	Silty Loam	0.39
TN024	61.00	D	2.18	5.35	Loam	0.29
TN037	0.00	C	3.51	4.86	Sandy Loam	0.27

Table 4-74. Soil Characteristics by STATSGO (State Soil Geographic Database) Soil Map Units in Subwatershed 080102070702. The definition of "Hydrologic Group" is provided in Appendix IV.

County	COUNTY POPULATION			Portion of Watershed (%)	ESTIMATED POPULATION IN WATERSHED			% Change (1990-2000)
	1990	1997	2000		1990	1997	2000	
Hardeman	23,377	24,702	28,105	1.24	289	306	348	20.4
McNairy	22,422	23,678	24,653	6.13	1,376	1,453	1,512	9.9
Total	45,799	48,380	52,758		1,665	1,759	1,860	11.7

Table 4-75. Population Estimates in Subwatershed 060101040702.

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Populated Place	County	Population	NUMBER OF HOUSING UNITS			
			Total	Public Sewer	Septic Tank	Other
Bethel Springs	McNairy	765	347	9	334	4
Selmer	McNairy	3,838	1,780	1,593	155	32
Hornsby	Hardeman	293	128	8	115	5
Total		4,896	2,255	1,610	604	41

Table 4-76. Housing and Sewage Disposal Practices of Select Communities in Subwatershed 080102070702.

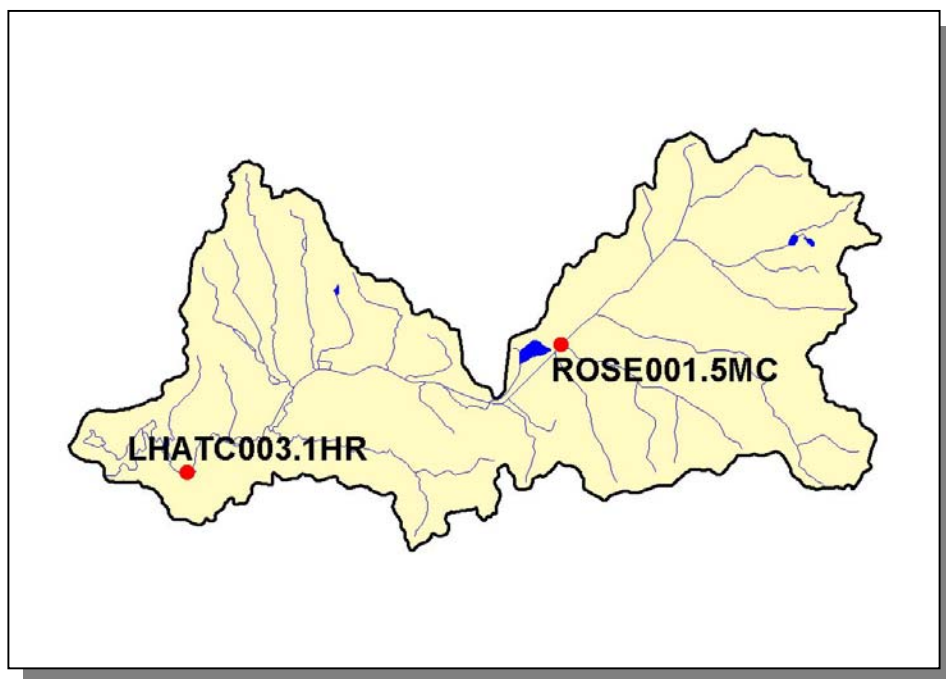


Figure 4-78. Location of Monitoring Sites in EPA's STORET Database in Subwatershed 080102070702. More information, including site names and locations, is provided in Appendix IV.

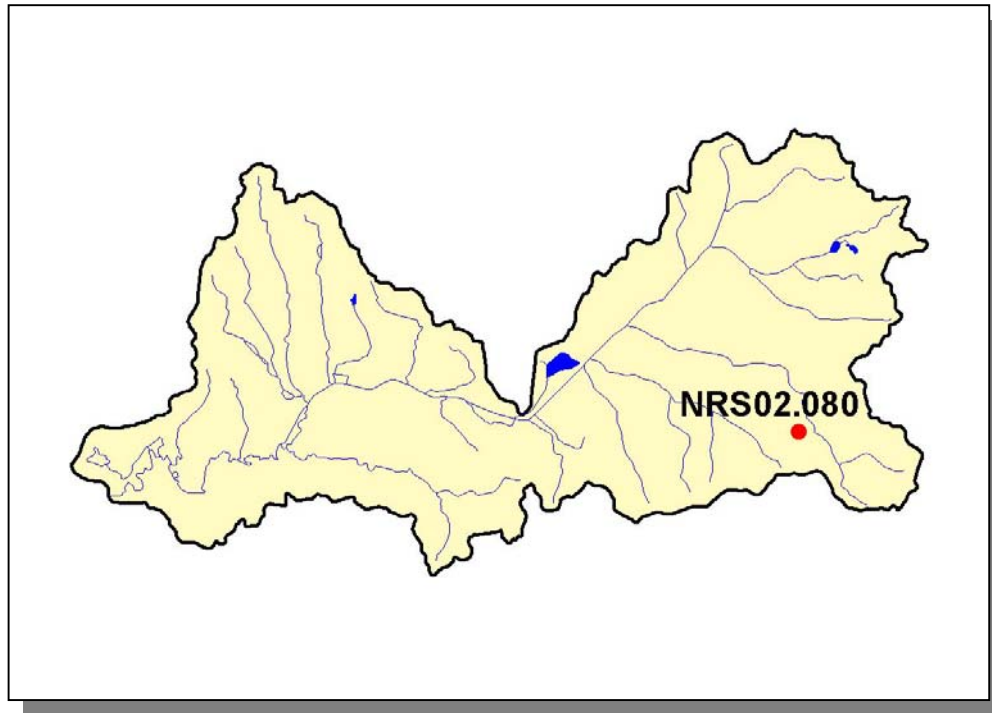


Figure 4-79. Location of Aquatic Resource Alteration Permit (ARAP) Sites (Individual Permits) in Subwatershed 080102070702. More information is provided in Appendix IV.

4.2.E.ii.a. Point Source Contributions.

There are no point source contributions in this subwatershed.

4.2.E.ii.b. Nonpoint Source Contributions.

LIVESTOCK COUNTS					
Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
374	671	<5	<5	551	6

Table 4-77. Summary of Livestock Count Estimates in Subwatershed 080102070702. According to the 1997 Census of Agriculture (<http://www.nass.usda.gov/census/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

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LIVESTOCK COUNTS						
County	Beef Cow	Cattle	Milk Cow	Chickens (Layers)	Hogs	Sheep
Hardeman	9,184	15,877	62	28	5,221	144
McNairy	5,659	10,365	7	491	11,346	98

Table 4-78. Summary of Livestock Count Estimates in Hardeman and McNairy Counties. According to the 1997 Census of Agriculture (<http://www.nass.usda.gov/census/>), "Cattle" includes heifers, heifer calves, steers, bulls and bull calves; "Chickens" are layers 20 weeks and older.

	INVENTORY		REMOVAL RATE	
County	Forest Land (thousand acres)	Timber Land (thousand acres)	Growing Stock (million cubic feet)	Sawtimber (million board feet)
Hardeman	247.1	247.1	5.0	18.6
McNairy				

Table 4-79. Forest Acreage and Annual Removal Rates (1987-1994) in Hardeman and McNairy Counties.

CROPS	TONS/ACRE/YEAR
Grass (Pastureland)	0.68
Grass (Hayland)	0.12
Legumes, Grass (Hayland)	0.07
Legumes (Hayland)	0.12
Grass, Forbs, Legumes (Mixed Pasture)	0.68
Corn (Row Crops)	11.10
Cotton (Row Crops)	9.41
Sorghum (Row Crops)	3.50
Soybeans (Row Crops)	10.37
Wheat (Close-Grown Cropland)	4.47
Summer Fallow (Other Cropland)	6.11
Other Cropland not Planted	2.65
Conservation Reserve Program Lands	0.28
Farmsteads and Ranch Headquarters	0.27

Table 4-80. Annual Estimated Total Soil Loss in Subwatershed 080102070702.